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Poultry Notes

TO RAISE EGG PRODUCTION.

Mark Early Laying Pullets.

THE MARKING of early laying pullets provides a practical method of selection where the trap nest is not used.

Records obtained by trap nesting in various parts of the world, show that:—

(1) Early laying pullets are, as a rule, the highest producers;
(2) Birds that lay late into the Autumn and are late in moulting are also high producers.

As the early layers and late moulters are high producers, a marking system will assist in distinguishing between profitable and unprofitable fowls.

In one convenient system of marking, a coloured leg band is placed on the left shank of all pullets that start to lay before six months of age. A band of another colour is attached to the left shank of pullets starting to lay when six and seven months of age, and a third colour band is used for fowls which commence to lay in the eighth month. Pullets that do not lay until after the eighth month should be eliminated from the flock, or kept in a pen by themselves, and forced for egg production.

Pullets which are early layers show the following characteristics:—

(1) A large red comb.
(2) An active disposition and a ravenous appetite;
(3) Roominess between the keel and pelvic bones;
(4) An occasional disappearance of the yellow coloration round the vent in some yellow shanked varieties.

In small flocks, individuals showing the above characteristics may be caught in the nest and then marked.

During the following season, all fowls that were marked as late maturing the previous Autumn and moult in December, January, and February can be culled. All the early laying birds and those that moult after 1st March may be kept for layers or placed in a special breeding pen and mated to a male known to have come from a high laying hen that has been trap nested. In this way the egg production of the offspring may be raised.

The method outlined is simple and, if properly employed, will raise the level of production in a flock.

FOR SOUND AND UNIFORM FLOCKS.

Desirability of Single Matings.

EVERY POULTRY FARMER who is desirous of breeding a sound and uniform flock should endeavour to have as many single breeding pens as possible, and the progeny of these birds should, as far as practicable, be used for breeding from in subsequent seasons, states the N.S.W. Agricultural Bulletin. Those who follow the line of least resistance and breed from flock matings, because of the saving of work, will never obtain the results that follow the use of single breeding pens. It only stands to reason, that in a large flock it is not possible to obtain the same uniformity as in a pen of eight to ten hens with one male bird.

Where it is possible to have only a few single breeding pens, the practice should be followed of utilising all suitable male birds bred from single matings for the breeding pens the following season, and the same procedure should be adopted with regard to the early-hatched pullets, the aim being to work gradually towards the point of producing all breeding stock from single breeding pens.

BREEDING STOCK.

Keep Them Free From Vermin.

An examination should be made of birds selected for the breeding pens (particularly of the male birds), to ascertain whether they are infested with body lice. If so, they should be treated at once.

A quick method of dealing with this parasite is to paint a thin line of nicotine sulphate along the top of the perches shortly before the birds go to roost at night. Where the male birds only are affected, they can be treated by dusting with flowers of sulphur. This can be done by using a shallow wooden tray large enough to lay the bird upon and catch the surplus sulphur, which can be used again. Sulphur should be thoroughly dusted through the feathers to the skin, and care should be taken to ensure that the whole of the body is dusted.

An inspection of the houses should be made for red mite, and if found in the walls of the houses a couple of sprayings with kerosene emulsion should be given, while the perches may be painted with creosote or wood preserving oil. Take care that the oil is applied early in the day so that the perches will not be oily when the birds go to roost, as this would cause them to become smeared with oil and so detract from their appearance.

BOOK REVIEW.

"Liberty In the Modern State."

Professor Laski's work, "Liberty in the Modern State," has been published in the "Pelican Series," and is thus available to all for 9d. or 1/-. The Brotherhood of the Hartwell (Victoria) Presbyterian Church, has prepared a short summary, believing that to-day there is threat to liberty and that there should be a revival of the democratic spirit in Australia.

In this summary of Laski's book it is pointed out that in these days of continuous economic expansion, there is no security for the great mass of the people; we have become involved in an intense conflict for power, which threatens our destruction.

"The alternative before us is stark. Either we must acquiesce in the maintenance of an economic system, which day by day brings War and Fascism nearer, or we must change the system. . . . The power to maintain liberty and freedom lies in men's willingness to organise for its maintenance. There is no foe more subtle than men's sense of apathy or helplessness."

This book is commended to all lovers of justice and freedom.

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NEWS OF THE MONTH.

AS we go to press the new Apple and Pear Board is holding its inaugural meeting. The Board has the best wishes of the industry in its efforts to render constructive service.

While the Board has statutory powers to deal with matters relative to export, the need will exist as before for growers to be kept fully in touch with all that transpires, so that goodwill and confidence will be established and maintained. Despite the enlarged powers over those possessed by the Apple and Pear Council, members of the Board do not underrate any of the difficulties ahead in guiding the industry through its problems to better conditions.

With regard to marketing in Australia the Board has the power to make a levy for publicity purposes. It is hoped that growers will respond readily in this connection. The value of educational publicity has been proved.

Publicity in U.K.

AT CONFERENCES of the Australian Apple and Pear Council for some time past delegates have discussed the matter of advertising Apples and Pears in the United Kingdom. The desire has been expressed that apart from the orthodox "advertising," including posters, etc., attention should be paid to the educating of the public as to the reasons why more Apples should be consumed. A wonderful health story can be told, and it is felt that by means of educational publicity a greater consumption of our fruits would follow.

Pure Fruit Juices.

IT IS PLEASING to observe the greater interest now being shown in the matter of pure fruit juices. Statistics reveal the enormous extent to which this trade has developed on the Continent and in England. In Australia there are far too many synthetic drinks consumed. By utilising the lower grades of fruit for fruit drink manufacture, much wastage would be avoided, and the public would be supplied with healthful products. There are big opportunities for growers and their associations to get behind the developing of this tremendously important business.

Trade with The East.

THE FRUIT EXPORT TRADE is perturbed because of the condemnation of Australian Apples at Ceylon.

A well-known Victorian shipper had 100 cases of Granny Smiths condemned and then 100 cases of Rokewoods, as being infested with "Caterpillar Borers." Well-known South Australian shippers have suffered in a similar way.

The fruit had been carefully inspected before shipment and thus the message from Ceylon is unintelligible. It seems strange that the responsible authorities cannot give a technical description of this alleged pest.

The matter has been placed before the Department of Commerce, as the position is entirely unsatisfactory, and warrants investigation.

PERSONAL

Congratulations are extended to **Mr. James Sheppard**, of Ranelagh, Huon (Tas.), on attaining his 80th year. Born at Ranelagh in 1859, Mr. Sheppard was a fruit buyer and exporter trading on the Melbourne, Sydney and Brisbane markets, in addition to London. Subsequently he and his brother erected an Apple drying factory at Ranelagh. After purchasing his brother's share, Mr. Sheppard purchased the goodwill and site of another factory and erected a modern building for evaporating and canning Apples. In 1929 he purchased the goodwill and site of another factory at Castle Forbes Bay, and his son now manages the new factory. Together with these interests Mr. Sheppard still finds time to manage his fine orchard.

Mr. H. J. Noonan has retired from his position of Secretary of the Orchardists and Fruit Cool Stores Association of Victoria. Mr. Noonan held this position for five years and won general esteem for his efficiency and courtesy.

Mr. R. Dunning, of Palmwoods (Q'ld.), recently announced his retirement from the position of Chairman of the citrus sectional group committee of the Committee of Direction of Fruit Marketing. Mr. Dunning has been Chairman since its inception in 1924.

Mr. Dunning intends to remain on the directorate of the Queensland Fruitgrowers' Society. Until last year he was Chairman of the Palmwoods Fruitgrowers' Association. He has also been President of the Palmwoods Show Society.

Mr. F. C. Pyke, a well-known fruitgrower, of Ringwood, Victoria, has left for a trip to U.S.A., where he will visit various leading fruitgrowing centres. When he returns he will have a very interesting story to tell.

OBITUARY.

It was with deep regret that we learnt of the death of Mr. Harvey H. Mason, who passed peacefully away on May 13. The late Mr. Mason was well known to fruit interests throughout Great Britain, Australia, and other parts of the world, particularly in his capacity as the Editor of the "Fruit, Flower, and Vegetable Trades Journal." For many years the late Mr. Mason also acted as European Agent for the "Fruit World" and its allied publications.

It is with regret that we learn of the death of Mr. W. C. Page, a well-known orchardist in the Huon district, Tasmania. The first instructor to be appointed by the Department of Agriculture to assist growers in the preparation of fruit for the various markets, Mr. Page also instructed hundreds of boys and girls at school packing classes, doing much towards the standardisation of the Tasmanian pack. Mr. Page's orchard was an example of the best cultural, pest control and pruning methods.

News in Brief

The M.I.A. Apple crop this season was virtually a complete failure, owing to the hot winds at the blossoming period.

At Griffith the Golden Queen Peach crop was only a little less than that harvested in 1938, whilst Pullars Cling broke all previous records.

Not more than 25 per cent. of the M.I.A. Prune crop will be saleable.

Despite heavy losses, the total deliveries of Grapes in the M.I.A. were only about 500 tons less than the normal, which is approximately 16,000 tons.

At the half-yearly meeting of the Griffith Producers Co-operative Company, the necessity for keeping Red Scale in check was again stressed.

The Annual M.I.A. District Conference of the Fruit Growers' Federation expressed disagreement with the recommendations made by the Royal Commission that Bananas, Pineapples, Passionfruit and Cherries should be permitted to enter into the Murrumbidgee Irrigation Areas. Also that the Orchard Tax be increased to 2/6 per acre for citrus and tropical fruits, and 5/- per acre for pome, stone, and vine fruits—the increase to provide a fund for hail losses.

Our Tasmanian correspondent states that all cool storage space in Tasmanian stores appears to be booked up.

The Department of Agriculture's action in conducting packing classes is greatly appreciated as there is a marked shortage of skilled labor.

As a result of growers putting on their second Bordeaux spray too soon, or substituting lime sulphur for fear of russeting their fruit, Brown Rot is stated to be causing a good deal of trouble in Tasmania.

The Tamar Valley Co-op. Co. Ltd. have commenced canning Apples in the north.

At a meeting of representatives from shipping companies and the Tasmanian State Fruit Board it was decided to stop receiving cargo a day earlier, so as to complete loading operations on time, and thus make sure of the arrival of fruit at Sydney and Brisbane on time.

Messrs. D. E. Ryan and C. O. Smith (Southern Division), and Mr. Bulman (unopposed, Northern Division), were returned in the recent State Fruit Board election. Mr. Ryan has been elected Chairman of the Board for the ensuing 12 months.

As a result of the success of the pre-harvesting report issued this year by Mr. A. V. Lyon, M.Agr.Sc., of the Merbein Research Station, it has been decided that a similar report will be issued each year to the press.

Interesting experiments are being carried out by Dr. Joan Hearman at the Griffith Research Station, into citrus root stock. Experts are of the opinion that the decline of citrus in Australia is bound up with unsuitable root stock.

The question of later opening hours at the Queen Victoria Market has again arisen. Vegetable growers are of the opinion that, as there would be no market if there were no produce, their wishes should receive first consideration.

Zinc applications are being tried for nematode affected Grape vines. This treatment has proved successful for citrus.

The growth of early-sown crops is causing some concern in the Goulburn Valley, as the wet condition of the soil makes it impossible for teams to get on with sowing operations.

Mr. A. Grant is leaving the Ardmona Fruit Products Co-operative Ltd. to become factory manager at Leeton, N.S.W. Mr. Grant has been instrumental in doing much for the benefit of employees at the Ardmona cannery.

The Eildon and Goulburn Weirs, and the Waranga Basin, are rapidly filling with the plentiful rains.

A new canning Peach record was created this season with 1,852,000 cases—60,000 cases more than last year.

The Shepparton Fruitgrowers' Association tendered a dinner to the officials of the Water Commission in appreciation of the work done by the Commission during the floods.

There is a move afoot in Shepparton to provide adequate housing for laborers during the fruit season.

Twenty-three Leeton cannery employees paid a social visit to the canneries of the Goulburn Valley during May.

The Annual Conference of the Fruitgrowers' Federation of N.S.W. will be held at Sydney on June 28-30, 1939.

The amazing increase in the fruit juice business in U.S.A. is revealed in the fact that 24,000,000 cases of fruit juices were put up last year as compared with 1,000,000 cases in 1929.

Fruits now being used in U.S. America and in Europe for the manufacture of pure fruit juices for public consumption include Apples, Pears, Oranges, Lemons, Grapefruit, Loganberries, Cherries, Raspberries, Strawberries, Apricots, Peaches, Prunes, Black Currants, Tomatoes, Grapes, etc.

As Spraying is a Necessity
—then use the World's Best—

NEPTUNE SPRAYS . . .

The better quality of NEPTUNE Sprays is always obvious by comparison with others. NEPTUNE Sprays conform to the highest standards, and they are consistently uniform in strength and quality. Successful orchardists recommend them. Try them yourself and prove that they're better!

Neptune White Spraying Oil
(SUMMER SPRAY)

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NEPTUNE PALSOL (Prepared Pale Oil)
NEPTUNE CLARIFOL (Winter White Oil)
NEPTUNE LIME SULPHUR SOLUTION (Clear, amber-coloured, free from sludge)
GENUINE MACCLESFIELD BLUESTONE
CHEMICAL SULPHUR (23871)
BERGER'S ARSENATE (Powder or Paste)
COLLOIDAL LEAD ARSENATE
ENGLISH BLUESTONE
SNOW
GENUINE BLACK LEAF 40
NEPTUNE LIME
POWDERED SULPHUP
COPPER SPRAY
NEPTUNE SPRAY SPREADER

NEPTUNE OIL CO. PTY. LTD. (INCORPORATED IN N.S.W.) ALL STATES.

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NEWS IN BRIEF (Continued)

A Mushroom, measuring 14 inches across, with a stalk nine inches high and five inches through, was found near Goulburn (N.S.W.), early in May.

Batlow fruitgrowers have expressed opposition to several of the recommendations of the N.S.W. Fruit Industry Royal Commission. The growers oppose the admission of Canadian fruit during November and December because of the danger of Fire Blight. They also oppose the allocation of money from the Orchard Tax for scientific research except as a voluntary contribution from the Federation.

With the development of precooling and refrigeration facilities, Argentina is expected to rank in a few years among the world's most important exporters of fresh Pears by shipping to Northern Hemisphere markets. 565,000 boxes were exported in 1937, as compared with 14,000 boxes in 1931. Because of the new areas coming into bearing, crops will increase enormously, and as there is not much opportunity for expansion in the local market, the export trade is expected to run into millions of boxes.

The need for an experimental orchard in Southern Victoria is stressed by Mr. E. Noonan, President, Southern Victoria Fruitgrowers' Association.

We are in receipt of a bulletin from the Agricultural Experiment Station, at Berkeley, California, re the varietal susceptibility to common Bean mosaic and transmission through seed.

We are in receipt of the fifty-seventh annual report for the fiscal year ended June, 1938, from the New York State Agricultural Experiment Station, Geneva, N. Y. The report gives a summary of all investigations being carried out at their station.

We acknowledge receipt of two Bulletins from the New York State Agricultural Experiment Station, Geneva, N. Y., re the Plum Curculio as an Apple pest, and a genetic study of variations in floral morphology and function in cultivated forms of vitis.

It is expected that about 10,000 citrus trees will be planted out in the Swan Hill (Vic.) district this year, particularly in the Murrabit area.

The next meeting of the Executive of the Victorian Fruit Marketing Association will be held on Friday, June 16, at the C.T.A., Melbourne.

During May the Minister for Agriculture in N.S.W. introduced a Bill to regulate the dried fruits industry in conformity with the Acts operating in Victoria and South Australia.

The sale of large fruit by count instead of by weight in Victoria is again advocated in the annual report of the Victorian Cool Stores Association.

The application made by the N.S.W. Wine Grape Growers' Association to Parliament for a permit to sell light wine longer hours than now permitted has been refused.

Prices for M.I.A. Wine Grapes are lower than last year, from £5 to £7 being received.

California now ranks first in the production of sugar beets, having displaced Colorado for the first time. The Federal-State crop reporting service reports our 1938 crop at 1,993,000 tons as compared with 1,984,000 tons for Colorado. Total United States production was the greatest on record totalling 11,292,000 tons.

Canadian canners have found the Jan-Ru Tomato excellent for canning, and are experimenting to improve it further. Experiments are also being carried on to find Tomato varieties suitable for canning for the British market.

At the recent Interstate Conference on Water Conservation and Irrigation, resolutions of far-reaching importance were carried. A thorough survey by Governmental authorities was recommended, and the setting up of a permanent advisory council.

A Banana plantation competition will be conducted at Mullumbimby, N.S.W., commencing on September 30, 1939, and concluding on September 30, 1940.

SOME NEW USES FOR FRUIT

Fruit Utilisation, Past, Present and Future

FROZEN PEACHES, PLUMS, BERRIES AND SLICED APPLES — CIDER AND VINEGAR — DRIED AND CANNED APPLES — CANNED AND BOTTLED JUICES OF PRUNES, BERRIES, GRAPES, APRICOTS, PEARS, PEACHES, APPLES, ORANGES, LEMONS, GRAPEFRUIT AND PINEAPPLE — APPLE FLAKES AND POWDERS.

IMITATION SYRUPS AND SYNTHETIC ESSENCES SHOULD BE REPLACED BY PURE FRUIT.

(By D. K. Tressler, New York State Experiment Station, Geneva, N.Y., U.S.A.)

THERE IS A BRIGHT FUTURE before the fruit industry, because of the attention now being paid to fruit preservation and utilization, according to Mr. Donald K. Tressler, of the New York State Agric. Experiment Station, Geneva, N.Y., U.S.A.

In the following report Mr. Tressler gives a resume of work which has been in progress for the past ten years at the New York, California, Massachusetts, Oregon, Washington, and Michigan Experiment Stations. The laboratories of the U.S.A. Bureau of Chemistry and Soils and the Bureau of Plant Industry have also carried out much work on the manufacture and preservation of fruit juices and wines, and on the freezing of fruits. Several leading firms are also engaged in this work.

WITH SO MANY LABORATORIES concentrating their efforts on finding new and improved uses for fruit and fruit products it is only natural to find that many changes in this field are occurring.

During the past twenty-five years the canning of fruit has grown to be an industry of great importance, until in 1937 the pack reached approximately 65,000,000 cases.

Similarly the frozen fruit industry has gone forward by leaps and bounds until in 1937 it reached the astounding total of more than 111.000,000 lbs.

The quantity of dried fruit amounts to more than 1,200,000,000 lbs. dried weight in 1937.

The preparation and preservation of fruit juice is an infant industry which is rapidly growing to maturity. For years Grape juice was the only juice preserved in quantity. The production of this juice was usually about a million cases.

In the past decade many new fruit juices have been introduced and rapidly risen to popularity. Now, the juices canned or bottled include Apple, Black and Red Cherry, Blackberry, Loganberry, Plum, Prune, Strawberry, Red Raspberry, Grape, Apricot, Pear, Peach, Orange, Lemon, Grapefruit, Pineapple, and Cranberry.

The jam, jelly, preserve, and marmalade industry is also very large, totalling more than seven and a half million cases.

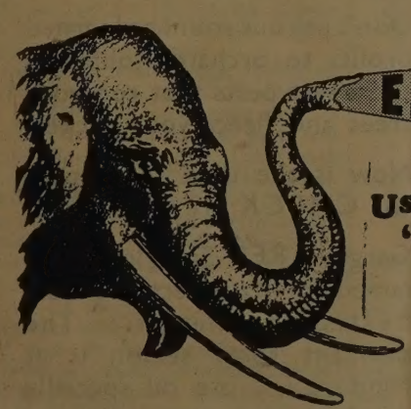
Great quantities of wine are manufactured in California, New York and some other States. The annual production is approximately 100,000,000 gallons. Some of this is distilled into brandy of which nearly 20,000,000 gallons are produced. The vinegar industry is also an important factor in the utilization of cull fruit, especially Apples.

It was estimated that in 1934 the total quantity of Apples preserved or converted into by-products was as follow:—

	Bushels.	% of total Production.
Cider and vinegar	16,000,000	10.0
Dried Apples . .	6,500,000	4.0
Canned Apples . .	5,000,000	3.0
Canned Apple sauce	2,000,000	1.2
Brandy	1,800,000	1.1
		19.3

Since these statistics are for the year 1934, it is probable that the amount of dried Apples produced has declined, whereas on the other hand the quantity of Apples used for juice has increased slightly.

The proportion of Grapes utilized for the manufacture of Raisins, juice and wine, is considerably greater than is the case with Apples, largely because of the great quantities used in making Raisins and wine. Apricots and Peaches are also preserved by canning and drying in very large quantities. Berries are utilized for freezing and canning and for the making of jams, jellies and preserves.



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Extract from "BETTER FRUIT," March, 1937, by Dr. R. L. Webster, Entomologist, State College of Washington, Pullman: CODLIN MOTH COVER SPRAYS—"Ever since the imposition of an arsenic tolerance in 1926, and even before that time, investigators have been testing other materials which may be used in place of lead arsenate. Following all these intensive and extensive investigations lead arsenate appears to have certain inherent qualities which place this material foremost as an insecticide for codlin moth control."

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When the fruit industry is considered as a whole it may be estimated that at present one-fourth of all of the fruit produced is preserved or utilized for the manufacture of by-products.

Recent Trends.

ALTHOUGH this quantity of fruit seems large, it is in reality relatviely small. Much larger quantities must be utilized if the continued increase in production is to be maintained. If some of the novel uses for fruit materialize, growers may find steadier markets which will not be so easily glutted by large crops.

Thus far the present commercial trends have been reviewed. If we are to look into the future, we must go farther than this, and survey the utilization investigations now in progress, noting particularly recent advances and discoveries which may soon prove to be of commercial importance.

In the New York State, developments are sure to follow with frozen Peaches and frozen sliced Apples, red and purple Raspberries: frozen Plums make excellent pies and should offer commercial possibilities.

The manufacture of juice from the Concord Grape has long since been an important industry. Little attention has been given to the juice of other varieties. The introduction of the Fredonia and Westfield Grapes may mean the expansion of Grape juice industry, because of the extension of the season and the introduction of juices having new flavors.

Improvements in methods of manufacturing Grape juice may also mean expansion of the industry because of the better quality of the juice offered the consumer.

New methods of preserving Apple juice are doing much to change a seasonal product of mediocre quality into a first-class juice available all the year round. The enamel-lined tin cans has proved to be an excellent container for this and other juices. It is prophesied that, if the Apple juice canners are careful of the quality of the product, Apple juice will soon be as important a commodity as Tomato juice.

The low-priced English Morello and Montmorency Cherries yield the best juice. Cherry juice is so full-flavored that it will stand diluting with sweetened water. The resulting beverage is delicious.

Pulpy fruit juices and beverages have been introduced in California. Peaches and Apricots make especially delicious beverages of this type. Such beverages are especially nutritious, since they contain all of the pectin of the fruit, which possesses special nutritive value.

Frozen pulped fruits are also being introduced in California. These products are prepared by comminuting the fruit and eliminating the seeds and skins by forcing the steamed fruit through a fine-screen. The fruit pulp is mixed with a sugar syrup and then quick frozen. The product resembles a sherbet but is richer and much more flavorful. Peaches, Apricots, Plums and berries make especially fine pulped fruits.

There is a demand for fruit syrups for the soda fountain trade. These products, which are made by dissolving a considerable amount of sugar in a fruit juice, are suitable for the making of milk shakes, carbonated beverages, ice cream sundaes, and for many other purposes. **Large quantities of imitation syrups are made from sugar, water, citric acid, and synthetic fruit flavors. Since pure fruit syrups are more nutritious, the public should demand that soda fountains use pure fruit syrups only.**

Concentrated fruit juices are made either by evaporating fresh juices in vacuum or by freezing out the water. These products are used in carbonated beverages, fruit punches, and other fruit drinks, sherbets, ices, and, in some instances, in table syrups. If concentrated Apple juice is made from Apples of low acidity the product prepared from clarified juice may be used as a table syrup. Most New York State Apples contain so much malic acid that it is necessary to neutralize a portion of it with calcium hydroxide and then remove the calcium malate in order to make the juice sweet enough to use on pancakes and waffles.

Many chemists have suggested that very large quantities of fruit juices would be utilized if the American public could be induced to drink carbonated fruit juices instead of synthetic "soft" drinks. Some manufacturers think that the cost of using fruit juices instead of the customary synthetic acids and flavors would be prohibitive. Actually, this is not the case, for **in the case of Apple, Grape, Cherry, Rhubarb, Orange, and Grapefruit beverages the cost of the beverages prepared from the diluted fruit juice would be no greater and in some instances less than the synthetic ingredients of the imitation product.** It is likely that the chief reason for the general use of the synthetic ingredients is that it is easier to prepare a brilliantly clear synthetic beverage, and, further, the synthetic product is more stable and does not cloud and spoil so quickly. **Since fruit beverages are more nutritious than synthetic ones, the public should be educated to demand beverages made from fruit juices. If fruit beverages replaced half of the imitation fruit beverages now sold, approximately one hundred million bushels of fruit would be utilized for this purpose.**

Possibilities of Novel Dehydrating Processes.

ALTHOUGH the more general use of refrigerated storage for fresh Apples and the rise of the canned Apple industry has pushed the evaporated or dried Apple industry into the background, this industry is by no means dead. Drum drying of Apples has recently been introduced and may become an important business since the "flakes" have many uses.

The drum-drying principle is simple, involving the spreading of a thin film of the product to be dried on the exterior of a steam-heated drum which is revolving slowly enough so that the material is dried and scraped off before a complete revolution has been made. Apple-sauce can be dried in 20 seconds in this way, provided dry air is blown over the drum. The dehydrated product is scraped off the drum by a horizontal knife, cracked into fine flakes. It keeps well, provided it is held in a moisture-vapor-proof package. It is used not only for making pies and sauce, and also in confectionery, puddings, and has been suggested for use in baking to retard the staling of crust. In view Dr. Ira Manville's findings concerning the nutritive value of Apple powder, it might be advantageous to add a small amount of Apple flakes to bread and other bakery products.

A Cherry film or flakes would be a very interesting product and would have many uses. It could be used in Cherry ices, sherbets, ice cream, confections, pies, puddings, etc.

Other drum dried fruits worthy of study would be Peaches and Plums.

A novel use for ordinary evaporated Apples and other fruits is for the manufacture of puffed fruit. In making this type of product the dried fruit is softened with water, then heated to approximately 175 deg. F. The hot product is then suddenly subjected to a high vacuum which causes it to puff. The product made from dried Apples is very tasty and resembles popped corn in appearance and texture. It is used as a breakfast cereal and in the manufacture of confections of various kinds.

Sparkling Cider.

IN Germany, France and England, sparkling or champagne cider is a very popular drink. A small amount of this product is made in America by the laborious "in the bottle" or French champagne fermentation process, but, probably because of its cost, has never been much in demand.

A few years ago, a novel closed tank or curvée system of making this product on a large scale at small cost, was proposed. At the New York State Agriculture Experiment Station, the work of the Canadians has been followed up, and methods of improving the quality of the product have been discovered. Briefly, the method consists in placing in a closed tank either Apple juice, or hard cider containing 10 to 20 per cent. of Apple juice and a small amount of sugar and some yeast food (ammonium phosphate). An actively fermenting yeast culture (starter) is added and the fermentation is allowed to proceed for 3 to 5 days

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until the carbon dioxide pressure reaches 90 lbs. per sq. in. The cider is then filtered through a closed Seitz filter and run directly to a refrigerated tank where it is cooled to about 30 deg. F. The chilled sparkling cider is fairly stable and can be filtered through a "germ proofing" filter and bottled without great loss of carbon dioxide. With the new method the entire process takes only about five days and does not involve much labor, therefore it should be possible to produce sparkling cider at such a low cost that it can be sold in competition with the better grades of ginger ale and beer.

Since the American prohibition era the wine industry has been making a comeback. The New York State wine industry has been at a disadvantage because only the poor yielding Delaware, Catawba, Elvira, Dutches, Iona, Clinton, Ives and similar Grapes may be made by the usual cellar procedure into fine wines. Recently, however, important processes have been invented which make possible the production of first-class sherry, port, and tokay from the heavy-bearing Concord and Niagara varieties.

A Glimpse into the Future.

FROM the above it is seen that the fruit utilization industries are going forward. It is difficult to foresee what will come to pass in the next decade but the following prophesies are offered:

Canned and bottled Apple and Cherry juices will become important all the year round beverages. The production of these juices will utilize millions of bushels of first and second grade Apples and Cherries.

Frozen sliced Apples will come into general use by bakers for the making of Apple pie in the Spring and Summer months.

Many fruit wines of low alcoholic content, now made principally in the home will become of commercial importance. These wines will be sold in large quantities in "dry" States where the sale of strong alcoholic beverages is forbidden.

Champagne cider is likely to become a popular beverage. Carbonated Apple juice prepared from Apple concentrate will be used in making an important soda fountain beverage. Other sparkling and carbonated fruit beverages will be introduced.

Improved methods of dehydrating fruits will mean increasing rather than decreasing use of fruit for drying. Apple flakes or flour will be incorporated into many bakery products. Dried Apple pomace will not only be used for the making of pectin but will be used for food in bakery and other products.

Gas-tight cool-storage compartments in which carbon dioxide can be permitted to accumulate until it reaches five or seven per cent. will come into general use. Using such compartments it is possible to keep in good condition fruit in cool storage for at least twice the length of the usual period. Bartlett Pears have been kept this way until April.

In conclusion, it appears that the future of the fruit industry should be bright since much attention is being given to fruit preservation and utilization. These researches are indicating many novel uses for fruit.

The U.S. Department of Agriculture is establishing four new regional laboratories for the expressed purpose of finding new uses of agricultural products. Two of these laboratories will consider, as a part of their programme, the utilization of fruit. This should give added impetus to the development of new products and by-products.

APPLE BLACK SPOT (venturia inaequalis) INVESTIGATIONS

SPORE DISCHARGE EXAMINED — IMPORTANCE OF BORDEAUX SPRAYING IN SPRING.

(By J. O. Henrick, Plant Pathologist, Tasmanian Department of Agriculture.)

DURING THE LAST HALF of 1930, Dr. W. J. Dowson (Plant Pathologist) and Mr. H. A. Turner (Horticulturist) commenced an investigation designed to determine when the discharge of winter spores took place in Tasmania, and for how long it was continued (1). In 1931 the investigation was repeated by Mr. H. A. Turner (2).

Comparison of the results for these two years shows that either one or more of the following factors—leaf-fall, winter conditions, spring conditions—influence the time of initial discharge and the number of discharges in a season.

Later Work on Winter Spore Discharge.

In the season 1935-36 the author commenced trials on spore discharge in the main apple-growing districts with the object of finding out what influences (if any) were exercised on the discharge by (a) previous growing season condition, (b) leaf-fall, (c) autumn, (d) winter, and (e) spring conditions. The difference between this trial and those of 1930 and 1931, was that details of climatic conditions from the previous summer onwards were collected, and leaves were exposed right up to the time of examination for spore discharge, to the natural conditions prevailing in the orchard. Over a period of years it was hoped to be able to get combinations of dry, wet and average Summer, Autumn, Winter and Spring seasons.

As continuous supplies of leaves were required from selected areas, a type slow to disintegrate was chosen. Sturmer proved ideal for this, but even with this variety, difficulty was experienced in some cases in obtaining suitable material (of the previous season) after about the end of November. Through the active co-operation of the Horticultural Division, leaves where required were obtained immediately after rain, placed in spore traps and then examined for emissions.

Owing to the conformation of Tasmania, it is possible to select areas so that several variations of climatic conditions could be obtained in the one year. Over a period of four years, using four centres in 1935-36, 36-37, 38-39, and nine centres in 1937-38, not any of the phases—wet Autumn, wet Winter, dry Spring—were experienced, but only the following combinations of conditions:—

(i) Wet Summer, followed by normal Autumn (leaf-fall late), mild Winter, wet Spring (five places);

(ii) Dry Summer, followed by dry Autumn (leaf-fall medium late), dry frosty Winter, normal Spring (nine places);

(iii) Normal Summer, followed by normal Autumn (leaf-fall normal), dry frosty Winter, normal Spring (seven places).

The Winter spore (ascospore) discharges under these three headings are interesting.

In (iii), where three seasons were normal, the leaf-fall normal, and the winter alone departing from normality, discharges in the seven places varied from 11 to 15, extended over from nine to 11 weeks, commencing with heavy discharges at approximately "pink" stage and continuing after rains well into November, becoming lighter from mid-October.

In (ii), with only the Spring showing normal rainfall, the other three seasons being dry, discharges in nine places, varied from three to five, extended over 14 to 19 days, commencing with medium discharges five to seven days before "full bloom."

These results are quite understandable and are according to expectations, but those under the remaining heading are surprising for the shortness of discharge period. It, however, is a vital period.

In (i), with a wet Summer and high infection and a wet Spring, discharges in the five places varied from two to six, extended over 18 to 24 days, commencing with heavy discharges seven to nine days after "green tip" and finished with light discharges one to two days before "full bloom." Careful check of slides showed no further discharges after this period.

It might prove of interest if, for academic purposes alone, figures for a year of wet Summer, wet Winter and wet Spring were obtainable.

Temperatures at which discharges took place varied from 48 deg. Fahr. to 70 deg. Fahr.

Spore Discharge Notification.

During the season 1937-38 a commencement was made with the broadcasting of information regarding the maturation of perithecia and the taking place of the first and subsequent emissions in each district, so that spraying, if not already carried out, would immediately be put in hand.

Protective Measures.

As a result of many years of trials, the Bordeaux programme for control of Black Spot of Apples is the recommended method in Tasmania, and orchardists are advised to apply it at "green tip," "pink" and "calyx" stage, later sprayings to be according to weather conditions. Orchardists have, from experience, learned to gauge what has become to be termed "spotty weather."

Undoubtedly, the adoption of the spray programme has had beneficial results, but two weaknesses are apparent.

Firstly, spraying at green tip, pink and calyx stages is too rigid as a definite programme for all seasons. It is quite likely that in certain years all three are necessary, but in others the first may be omitted. This is borne out by the results of ascospore discharges given earlier in this article.

In these days of wide competition, reduction of the cost of production is the only way the orchardist can increase his profits, and the possible saving of expenditure on one unnecessary spraying is not to be disregarded.

Secondly, in spite of the fact that the spraying programme has been and is being carried out efficiently by the majority of growers, the incidence of spot has not been greatly reduced. Seasons of light or negligible infection have been followed by seasons of very severe infection, and vice versa. This raises the question of how much of the improvement in a season is due to the spray programme and how much to lack of suitable conditions for ascospore development. **Whatever the answer, results show that spraying is merely a protective measure and not one of eradication.**

Eradicant Measures.

In order to determine the possibility of discovering a practicable method of eradication to replace these protective measures, a number of small

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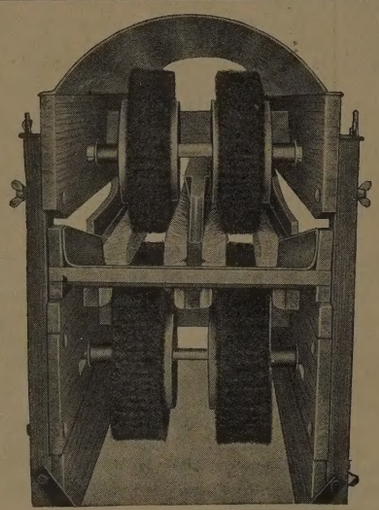
trials involving the treatment of leaves with dilute solutions of (a) nitrogen, (b) sulphur and (c) chloride compounds, were carried out in the laboratory in the Winter and Spring of 1937. As the result of these trials, certain treatments were tested on small blocks of trees in two orchards, and it has been arranged to carry the trials further on a small, compact orchard area this year. A report of these eradicant tests will be published later.—"Tas. Journal of Agriculture."

References.

(1) Turner, H. A., and Dowson, W. J.: "The Date and Maturation of the Winter Spore Discharge of Black Spot." Tas. Journal of Agric., Vol 2-3, 124-128.

(2) Turner, H. A.: "Spore Discharge of Black Spot (Venturia inaequalis)." Tas. Journal of Agric., Vol. 3-3, 128.



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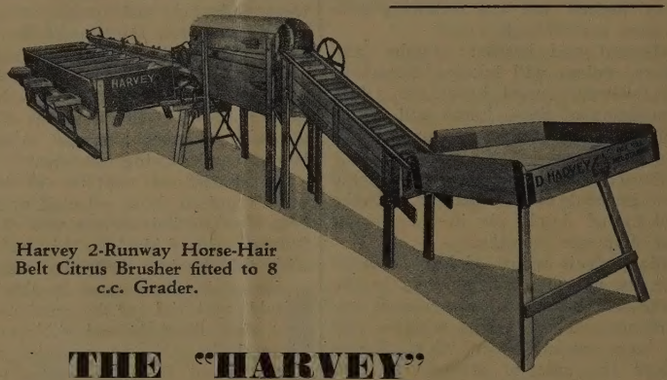

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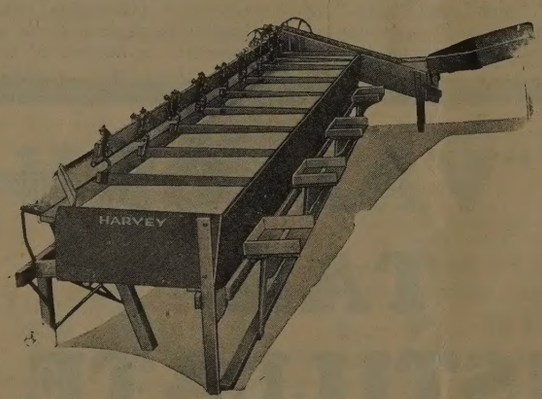

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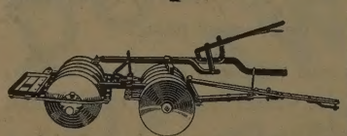

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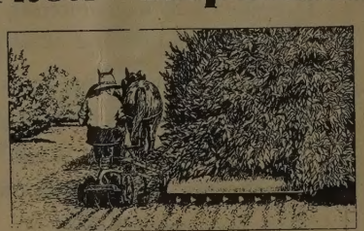

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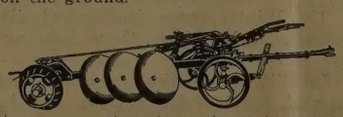

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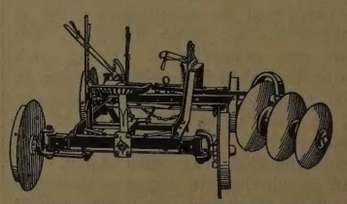

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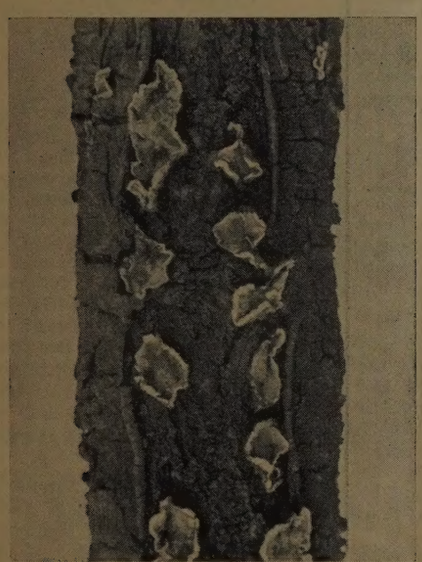
Silver Leaf Disease of Fruit Trees

Control Measures Recommended

By A. T. Pugsley, B.Agr.Sc., Assistant Plant Pathologist, in "Victorian Journal of Agriculture."

SILVER LEAF has been known to occur in Victoria for a number of years. It has been recorded from widely separated districts, but in a few instances only does it seem to have established itself. However, in England it is regarded as one of the most important diseases with which the fruit grower has to contend, while in South Australia, Adam (1) reports that it has become more prevalent in recent years. Although our Australian climate may exercise some natural check on the spread of the disease, the position should be closely watched so that on its appearance in an orchard the appropriate measures can be taken to prevent its establishment with the subsequent loss of trees.

The Silver Leaf Fungus (Stereum purpureum) attacks many fruit trees, such as Apples, Plums, Apricots, Peaches, Nectarines, etc., although in Victoria it has been reported only on Apples, Plums, and Apricots. In Britain, Plums and Apples seem to be the most susceptible, but, strangely enough, cases have been noted in Victoria where Apricots have been severely attacked and killed, while Apples alongside in the same orchard have shown no signs of the trouble.



The spore bearing Silver Leaf Fungus on the limb of an Apricot tree.

(Illustrations courtesy Victorian "Journal of Agriculture.")

Symptoms.

Silvering of the Foliage: The first indication of the disease in an orchard usually appears as a silvering of the foliage of one or two branches of a tree. Later in the season these silvered leaves may split and become very ragged.

Death of Branches: If the silvering of the leaves is followed by the dying back of the limbs which bear them, one can be reasonably sure that the trouble is true Silver Leaf. The trouble may progress from limb to limb until ultimately the tree is killed, but in some cases the tree naturally recovers; this seems particularly so with vigorous trees and during dry seasons.

Discoloration of the Wood: If an infected branch be sawn off at the base, a dark brown discoloration will nearly always be evident in the wood, and it is in this part of the tree that the parasitic fungus grows and produces what is thought to be a toxic substance which causes the leaves to become silvered.

The Fungus Itself: Following upon the death of a limb the reproductive or fruiting bodies of the fungus may develop on the dead wood (Fig. 2). These fruiting bodies may appear as bracket-like projections or as small discs with incurved edges. When newly formed they are of a characteristic purple-mauve color, but as they age they become brownish. They frequently are found on dead branches on the pruning heap, or on stumps during the Autumn, and especially after heavy rain. The most important point to remember about these fruiting bodies is that they produce vast numbers of spores which are subsequently distributed throughout the orchard by the wind, in a manner similar to that by which the spores of the more common Polystictus Fungus are disseminated.

Control Measures.

Before setting out the measures to be adopted for the control of Silver Leaf it is necessary to consider the method by which the fungus gains entrance to a healthy tree. It has already been pointed out that the fungus spreads by means of spores produced from the fruiting body of the fungus on the dead wood. Overseas workers have proved that these spores cannot cause infection through sound, uninjured bark. They have shown that the fungus belongs to the group known as wound parasites, so that it is only through injuries, such as pruning wounds, damaged trunks, etc., that the fungus can gain entrance to the tree. Penetration is more readily effected through fresh wounds than through those that have been formed for some time.

Knowing the way in which the fungus spreads it follows that control measures should be directed at (1) the removal of the sources of infection, and (2) the protection of wounds.

Removal and Destruction of Affected Branches and Trees.

A branch that is silvered only lightly may be left for a short time if previous experience leads one to believe that it will recover. If, however, the affected limb shows signs of dying it should be removed at once and burned. In removing such branches care should be taken to cut below the discolored wood; if this is not done the trouble will most likely extend to other parts of the tree. It is, of course, necessary to dress the wound as described below.

If the tree is badly silvered, recovery is not likely. It should be grubbed out as soon as possible. Any gaps may safely be replanted with healthy trees. It is important to burn dead trees, branches, etc., before the fungus has an opportunity of forming its fruiting stage on them.

The Protection of Wounds.

Where it is necessary to remove a broken or diseased branch the cut should be made close to the main branch so that the wound may quickly callus over. Injuries caused during cultral operations should be pared smooth with a knife.

It is most important that all wounds and injuries should be painted as soon as possible. In this regard the following preparation has been recommended by Brooks and other investigators: To 2 lb. of white lead paste (as bought), add two teaspoonsful of paste driers and two tablespoonsful of linseed oil. Mix, then add two tablespoonsful of turpentine, and mix well.

Reference.

(1) D. B. Adam: Silver Leaf Diseases in Orchard Trees. — Dept of Agriculture, South Australia. 40, page 693.

Showing dead limb of an Apricot tree. Death was due to attack by the silver leaf fungus.

STANDARD CASE MEASUREMENTS.

Tops To Be Longer Than Bottoms to Provide for Bulge Packing.

The attention of growers and all interested in the supply to fruitgrowers of case material for next season is drawn to the new Commonwealth Regulations which make it necessary for the tops of Apple cases to be ⅛ in. or ¼ in. longer than the bottoms, and tops of Pear cases to be ¼ in. to ⅜ in. longer than the bottoms. This regulation is to provide allowance for bulge packing.

Attention is also drawn to regulation that the tops and bottoms must not exceed 3/16th inch. in thickness. It is also essential that four cleats be used.

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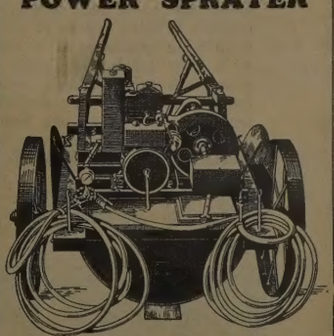

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CITRUS NEWS AND NOTES

N.Z. GOVERNMENT ACQUIRES HOME-GROWN LEMON CROP.

Growers Guaranteed Fixed Price of 6/9 to 4/5 Per Case.

Packing Sheds Taken Over.

N.Z. Lemon Growers Approve of the Marketing Plans of the Internal Marketing Division.

THE ANNUAL MEETING of the Auckland Citrus Growers' Association was held at Auckland, N.Z., on April 27 and 28, 1939.

There was a large attendance, and the annual report, which requested better treatment from the Government in relation to the assessed fair average price scheme, was adopted.

Mr. A. H. Honeyfield, manager of the Auckland Branch of the Internal Marketing Division, stated that control by the Government of the marketing of the whole of the N.Z. Lemon crop, together with payment of fixed prices to growers, would come into effect on May 1, 1939.

6/9 to 4/5 Per Case.

The prices at which the Marketing Division would accept Lemons delivered to it for sale would be as follows:—

Extra fancy grade, 6/9 a measure case; fancy grade, 5/3; good grade and small grade, 4/5; peel Lemons affected with skin blemish not exceeding 10 per cent. of the surface of any one Lemon, 1½d. per lb.; peel Lemons affected with skin blemish exceeding 10 per cent. but not exceeding 33 1-3 per cent. of the surface of any one Lemon, 1d. per lb.; juice Lemons, ½d. per lb.

A measure case was defined as one which when loose-packed with fresh Lemons would yield a three-quarter bushel case of cured and packed Lemons.

Marketing Control.

Continuing, Mr. Honeyfield said that no producer would sell any Lemons harvested on or after May 1, 1939 unless a sale was made in accordance with the regulations. A producer could sell to any person purchasing for his own use, but not for resale, if the producer sold at his orchard and delivery was taken there by the purchaser.

Any additional charges, other than grading charges and services incidental to grading in making suitable for the market Lemons not properly picked, packed or mishandled would be deducted from the money payable to the producer. Empty cases would be removed by the producer from the sheds of the Internal Marketing Division within seven days of the time he received particulars as to grades and prices for Lemons delivered by him.

Packing Sheds Taken Over.

In conclusion, Mr. Honeyfield stated that during the week-end sheds would be taken over in Kerikeri, Auckland, Tauranga, Gisborne and Wellington.

The Chairman, Mr. J. A. Lambden, in moving a vote of thanks to Mr. Honeyfield, wished the Internal Marketing Division every success in the operation of the regulations.

Association's Levy.

The meeting passed a resolution approving of the financing of the Auckland Citrus Growers' Association by means of a case levy to be deducted by the Internal Marketing Division and paid to the association; also, that the levy should be made from year to year, with a minimum of 5/- a grower.

VICTORIAN ORANGE CROP.

Navel Crop Substantial But Lighter Than Last Year, Valencias About the Same.

Reporting on his recent tour of citrus districts in Victoria and New South Wales, the general manager of the Victorian Central Citrus Association (Mr. A. W. Schwennesen) stated recently that this season's crop of Navel Oranges would be lighter than last year's in all districts, but sizes were much larger, due to favorable growing conditions in the Autumn.

Because of the larger-sized fruit it was difficult to estimate the extent to which the crop would be down. **Last year's crop had been heavy, and this year's production would not be much below normal.**

Indications were that the 1939 crop of Valencias would be at least equal to that of 1938. Lemon crops would be lighter than last season's, but Grapefruit would probably be around 1938 levels.

Quality of all varieties of citrus appeared to be good. Trees in citrus districts had made good growth during the Autumn and groves were never in better condition.

CITRUS BOUNTY.

"Increase Improbable," States Commerce Minister.

The Chairman of the Australian Citrus Advisory Council recently placed before the Minister for Commerce, Senator McLeay, a request that the bounty payable under the Citrus Fruits Bounty Act on exports for 1939 be restored from 1/6 to 2/- per case. The Minister promised that the request will be given full consideration by the Federal Government, but added that in view of the heavy defence expenditure the prospects for an increase were not bright.

NEW CITRUS FRUIT WRAPPER.

No longer is distance a barrier to the shipment of Palestinian fruit. According to Industrial and Engineering Chemistry a new method of impregnating wrapping paper has been developed which may save Lemon and Orange growers of Palestine hundreds of thousands of pounds annually. Diphenyl is the impregnating agent. It reduces the loss from rot in storage and transmission to a sixth or tenth of that usually experienced. In one trial shipment to England the loss was reduced from 54 to 5 per cent.; in another from 33 to 6 per cent. A Farkas in the Department of Physical Chemistry of the Hebrew University, Jerusalem, is the man who hit on impregnating paper with diphenyl.—"New York Times," 2/5/39.

FRUIT JUICE RESEARCH.

The Deputy Chief Executive Officer of the Council for Scientific and Industrial Research (Dr. Richardson) stated recently that provision was being made for the erection of a fruit juice laboratory at Homebush to deal with researches on fruit juices; further, that the officer in charge of the Section of Food Preservation (Dr. J. R. Vickery) is at present abroad, and is making investigations on modern technique for fruit juice preservation.

NEW SOUTH WALES

Murrumbidgee Irrigation Area Notes

REVIEW OF THE APPLE, CANNED FRUITS, PRUNES, VINE AND CITRUS CROP — EXTRACTS FROM GRIFFITH PRODUCERS' CO-OPERATIVE COMPANY'S HALF-YEARLY REPORT — VALUE OF NEW ZEALAND MARKETS TO CITRUS GROWERS — ROYAL COMMISSION'S RECOMMENDATIONS DISCUSSED AT M.I.A. DISTRICT CONFERENCE — SOME DISAGREEMENT EXPRESSED — RICE GROWERS' CROP PROSPECTS BRIGHT.

By Our Correspondent.

THE MOST EVENTFUL irrigation season in the history of the Murrumbidgee Areas concluded last month. A protracted drought, restriction of irrigation supplies, a heat wave unprecedented for its intensity and duration, followed by phenomenal rains and floods were each and all well calculated to prove ruinous to farmers. Yet taking the extraordinary conditions into account the Area came through this series of ordeals remarkably well. Unlike some other districts where specialisation in one or more lines of produce is the rule the M.I.A. carries its eggs in many baskets, and after all, perhaps there is still something to be said in favor of planting an orchard on the much condemned "fruit salad" principle.

Apples.

Reviewing the season briefly, it may be said that the **Apple crop was virtually a complete failure,** hot winds during the critical blossoming period having adversely affected the setting of fruit.

The district is not suited for red Apples, as they are invariably inferior in color and flavor to the mountain grown fruit and are used here mainly as pollinisers for the main plantings of Granny Smith. The latter variety is inclined to produce very exposed pistils and stamens in its blossoms, and is consequently subject to damage by hot winds during the setting period. The Area Granny Smith Apple has earned an excellent reputation for its export qualities, and the loss of the crop was a serious blow to many growers.

Canning Fruit.

The Apricot crop was an excellent one, both for size and quality of fruit, and was mainly absorbed by the Leeton Co-operative Cannery and the Sydney proprietary factories at the Sugar Concession Committee's prices of £12 per ton f.o.r. Area sidings for canning quality, and £10 per ton delivered to factories for jam quality.

Although prices were down approximately £2 per ton on **canning Peaches,** the season was fairly satisfactory to most growers. During the Summer droughty conditions and high temperatures threatened losses to growers because of the likelihood of the fruit not coming up to the minimum size required by canners. Heavy rains, however, commenced in late February, and continued throughout March, and though harvesting was interfered with the fruit quickly responded and was generally of a larger size than normal, and the total tonnage delivered was greater than had been expected. At Griffith, the **Golden Queen** crop was only a little less than that harvested in 1938, whilst **Pullars Cling** broke all previous records.

Prunes.

A fine crop of Prunes was badly damaged during the drying period by the persistent wet weather, and not more than 25 per cent. will be saleable. The exceptional nature of the rains will be realised when it is stated that in nine weeks more than the average annual rainfall was recorded, and as sun drying is almost universally relied upon, Prunes were damaged by fungus growths before they could be dried. Whilst wet weather over such a protracted period has seldom been experienced, the records show that rains in March and April are to be expected, and it is now more than ever evident that a dehydrating plant should be part of the Prune grower's equipment.

Vines.

The heaviest losses due to the rains were suffered by vine growers, and damage to Sultanas, table and wine Grapes was general.

Wine Grapes are sold at prices which are fixed on the basis of a sugar test of 15 degrees Baumé, with a rise and fall of 10/- or 6/8 (according to variety) per degree over or under this standard.

Wine Grape growers were hard hit this vintage by three factors: Firstly, the prices fixed for the standard test were lower per ton than last season. Secondly, the Grapes tested generally about 2 degrees lower than normal, and thirdly, much of the crop was so damaged by rain as to be only fit for distillation purposes. That the crop would have broken previous production records but for the rains is demonstrated by the fact that despite heavy losses the total deliveries were only about 500 tons less than normal, which is approximately 16,000 tons of Grapes. Instead of fetching £12 or more per ton nett on the Sydney market, table Grapes were so severely damaged that a large proportion was fit only for the still at round about £2 to £2/5/- per ton.

A veil may be drawn over the picture by saying that 1939 was the worst season for the Grape growers in the history of the Area.

CITRUS GROWERS have a happier story to tell. The crop was heavy and the prices received satisfactory. At the half-yearly meeting of the Griffith Producers' Co-operative Company last month the directors' report stated, in part:—

"**This is the biggest crop of Navels the company has had to pack since it commenced business,**" the report adds.. "'**Fortunately the New Zealand market was open to us, and we sold there over 40 per cent. of the crop.**

"Prices realised were satisfactory, but there was a higher percentage of wastage than usual on the fruit from farms situated in bad frost localities.

"For the first time, **fruit badly affected with Red Scale was sold in a separate pool. The price realised was more than 2/- per bushel less than the general pool average.** This is the best argument for clean fruit, and we stress again the vital necessity for keeping Red Scale in check.

"At the close of the year **90,000 lug cases** of **Late Valencias** had been sent to New Zealand. On fruit delivered in the New Year, the directors and Citrus Committee decided to pay a substantial bonus over that delivered to December 31, 1938.

"Prices for **15,000 bushels of Lemons** sold during the half-year showed a very good average return.

"Close on **8,000 bushels of Grapefruit** were sold, and the market from September onwards was very good for quality fruit."

These extracts speak eloquently of the value of the New Zealand market, which was for so long closed to the Areas.

Royal Fruit Commission.

THE RECENTLY MADE recommendations of the Royal Commission which inquired into the N.S.W. fruit industry have in some instances met with the disagreement of growers. At the annual M.I.A. District Conference of the Fruit Growers' Federation, held last month at Yenda, attention was drawn to a recommendation of the Commissioner that the Irrigation Act be amended to permit of the introduction into the Areas of **Bananas, Pineapples, Passionfruit and Cherries.** From the inception of the M.I. Area all fruits and vegetables have been prohibited from entry. Conference resolved to enter an emphatic protest against the proposed amendment, as it was contended that the likelihood of introducing pests and diseases outweighed any benefits to the population in being able to enjoy these forbidden fruits. The value of the New Zealand market for citrus alone is such that every possible source of entry of Fruit Fly should be prohibited as the Dominion insists that fruit will only be permitted to enter New Zealand from certified Fruit Fly free districts.

The Commissioner also recommended that the existing orchard tax of 1/- per acre be increased to 2/6 per acre for citrus and tropical fruits, and to 5/- per acre for pome, stone, and vine fruits. This proposal was opposed by Conference on the grounds that the increase was intended to provide a fund from which growers suffering losses through hail would be compensated. Hail losses are very rare on the Areas, and it was contended that little, if any, benefit would accrue to growers here from the establishment of such a fund. The main causes of losses to Area growers are from frost, heat waves, or unusually heavy rains, etc., and no compensation for these losses is contemplated from the proposed fund.

The past five weeks of fine weather have been taken full advantage of by **rice farmers,** who are harvesting a record crop. Up till the end of February, owing to the low level of water stored at Burrinjuck Dam, it appeared likely that practically the whole rice crop would be lost owing to the necessity for water restrictions. The breaking of the drought changed all this with dramatic suddenness, and the growers will be richer by some £350,000.

After two years of drought the countryside surrounding the Area had been virtually reduced to a dust bowl, but the heavy rains have now turned a wilderness into green pastures. The oldest residents do not recall any previous Autumn when herbage and grasses were so abundant.

Experiments are being made at Renmark (S.A.), in giving trees and vines a good dressing of sulphate of ammonia after the crop has been picked.

PEAR PRODUCTION IS INCREASING AT BATLOW, N.S.W.

Typical trees of the Winter Cole variety.

Left: Unpruned.

Right: Same tree pruned on the lateral system.

NEW SOUTH WALES (Continued)

Growers' Conference at Young.

Opposition to Several of the Recommendations of the Royal Commission.

A CONFERENCE of delegates of the Southern District of the Fruitgrowers' Federation of N.S.W. met at Young in May.

The conference was represented by the following delegates:—

Batlow Packing House: A. E. Herring, O. J. Butz and H. V. Smith.

Goulburn A. and H. Society: H. A. Mills and F. Cooper.

Kingsvale Rural Co-operative Society Ltd.: A. E. Horne and N. W. Graham.

Maimuru Rural Co-operative Society: H. R. Commens.

Penrose Agricultural Bureau: J. E. Tickner.

Tallong Fruitgrowers' Association: R. Kettle.

Waterview Rural Co-operative Society Ltd.: J. Hush.

Wirrimah Rural Co-operative Society: J. Allen and M. W. Phillip.

Young Cool Stores Ltd.: W. C. Dickinson.

Yass: F. R. Finn, W. E. Schumach and B. McReynolds.

Young Fruitgrowers' Co-operative Society Ltd.: J. D. A. Hunter, C. Johnson, H. C. Jeffress and B. Cunich.

Young District Producers: B. F. Callaway.

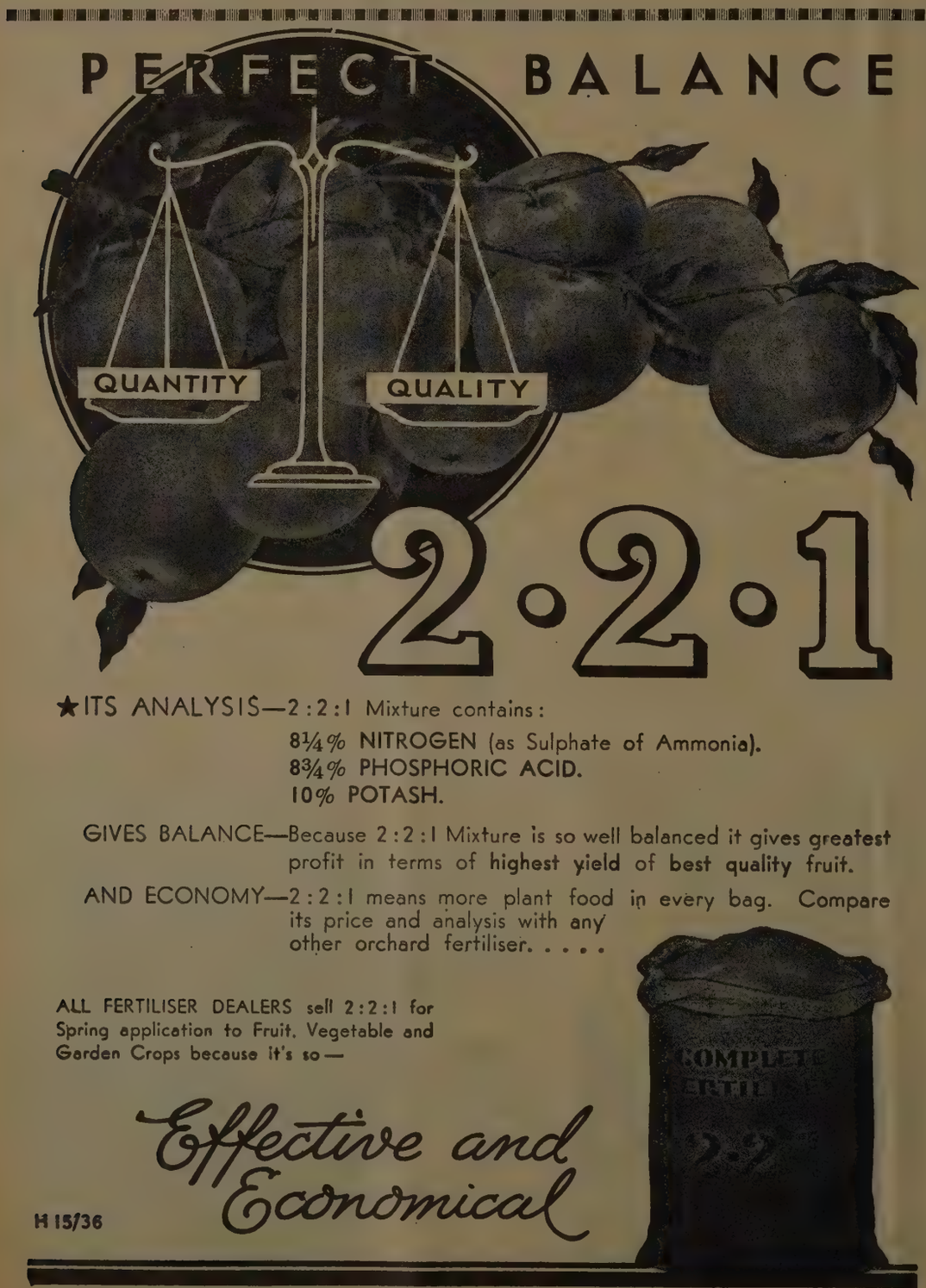
Buxton Agricultural Bureau: S. A. Thornell and K. D. McGillivray.

The Secretary of the Federation, Col. E. E. Herrod, was also in attendance.

Questions discussed included the action of the railways in approaching individual societies instead of through an offical body; the system of rebates by agreement now operative with the Railway Department, causing unnecessary work and expense to growers; reduction of rail freights; the need for more action in the section created by the Department of Commerce to deal with fruit questions and fruit products; that bandaging of Apple and Pear trees to control Codling Moth infestation be made compulsory in the Young District.

Resolutions from Batlow re opposition to recommendation of prohibition of sale of fruit stored after October of each year, and that such fruit be marketed as such when exposed for sale by retailers; opposition to admission of Canadian fruit during November and December because of risk of introduction of Fire Blight; that retailers be required to exhibit the grade on fruit displayed for sale; that packing houses be licensed and that inspection be made at these houses; opposition against allocation of any money from Orchard Tax for scientific research except as voluntary contributions from the Federation; that delegates from co-operative societies consider the recommendation of the Commissioner to form a strong Central Association of Growers (as distinct from a Marketing Board); that the quality of all shook fruit cases be standardised and the standard of each grade be marked on the case were passed.

The proposed admittance of N.Z. Potatoes was also opposed, as likely to detrimentally affect the N.S.W. Potato industry.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FRUITGROWERS' FEDERATION OF N.S.W.

Important District Conference at Gosford.

Sectionalisation of the Industry Discussed.

Recommendation Adopted for Retention of Present Orchard Registration (1/- per acre) with a Maximum of 2/6

Delay in Modernising Darling Harbor Goods Yard Deplored.

THE DISTRICT CONFERENCES of the Fruitgrowers' Federation of N.S.W. commenced late in April and many matters of importance are being discussed for submission to the Annual General Conference, to be held in Sydney on June 28, 29 and 30.

At the Central Coast Conference held at Gosford, Mr. A. S. Brown, Board member of the Federation, occupied the chair, and in reviewing the work of the year made commendatory references to the work of the Secretary of the Federation, Mr. E. E. Herrod, before the Royal Commission of Enquiry into the fruit industry. Later in the conference the following resolution was carried with acclamation.

"That a vote of appreciation be placed on record and conveyed to the Secretary of the Federation for the able manner in which he represented the Federation before the Royal Commission and for the excellent address delivered to the Commission at the close of the sitting."

The chairman also referred to the valuable work being done by the Embargo Abolition League of Australia in reference to the New Zealand trade position. The League was strenuously opposing embargoes upon Potatoes and Citrus as between the various States and Dominions, and was comprised of representatives of most citrus-growing districts near Sydney and on the coast. In this connection the conference passed the following resolution.

"That the Federation be requested to continue both financial and moral support to the operations of the Embargo Abolition League of Australia, in its endeavors to secure the removal of the present trade restrictions and embargoes on primary produce between N.Z. and Australia."

Considerable discussion took place in regard to the Orchard Registration Fee, resolutions being proposed opposing any increase; that it remain as at present with a maximum of 2/6; and that it be increased to 1/6 with a maximum of 2/6 if the Federation could be sectionalised and the increased amount controlled by a citrus section of the Federation. The conference finally agreed that the Registration Fee should remain as at present with a maximum of 2/6.

Research Work Appreciated.

Neglected orchards and abandoned orchards, and prevailing pests of the district and industry had lengthy discussion and the Department of Agriculture was congratulated upon its research into the problems of Black Spot control. It was claimed that the disease known locally as "Burnt Leaf" had appeared in a number of orchards last Autumn, and had resulted in the failure of a number of crops, also seriously damaging the bearing surface for future years. The Department was also requested to make available any information in its possession for the control of Citrus Bud mite.

The critical financial position of many growers as a result of successive years of drought and the recommendations of the Royal Commission

(Continued on page 32.)

Goulburn Valley News and Notes

RAPID GROWTH OF PASTURE CAUSES SOME INCONVENIENCE — WORK PROCEEDING IN ORCHARDS — RESERVOIRS RISING — NEW CANNING PEACH RECORD DESPITE DIFFICULT SEASON — MOVE FOR SUITABLE HOUSING OF LABORERS AT SHEPPARTON — FAREWELL SOCIAL TO MR. A. GRANT (FACTORY MANAGER, ARDMONA FRUIT PRODUCTS CO-OPERATIVE LTD.) — SOCIAL VISIT BY LEETON CANNERY EMPLOYEES.

By Our Correspondent.

Prolific Growth.

IN THE SPACE of a few months most parts of Victoria and the Goulburn Valley in particular have seen a transformation from the most severe drought ever experienced to perhaps the most prolific growth of vegetation in the memory of our oldest residents.

So rapid has been the growth that it has been quite impossible to keep the pasture in check by grazing cattle and sheep. In order to minimise foot rot amongst sheep, farmers will find it the best policy to concentrate on two or three paddocks, leaving the others to cut for ensilage.

The most serious problem is the early-sown crops, which in some instances are already two feet high. The wet conditions of the soil prevents teams from getting on with sowing operations, which must be completed by June.

Orchard Work.

Work in Goulburn Valley orchards, which has been at a standstill for the past month, has now been resumed with the usual activity.

The weather for the past fortnight has been fine, with warm, sunny days, and pruning is now almost general. Many orchardists are also busy with their Winter ploughing. Others prefer to allow the abnormal growth to stand over till the Spring, to be turned under as green manure to add nitrogen to the soil.

Storages Rise.

Storages in the three reservoirs connected with the Goulburn System have substantially increased as a result of the continued rains.

With a capacity of 306,000 acre feet, the Eildon Weir on Saturday last held 209,940 acre feet, in comparison with 161,540 acre feet the previous week. Goulburn Weir, which on the previous week was at its full capacity of 20,700 acre feet, was reduced to 19,970 acre feet as a precautionary measure, while the Waranga Basin storage increased from 151,000 acre feet to 170,300 acre feet.

Waranga's full capacity is 333,400 acre feet.

1939 Record.

In spite of the water shortage, the Australian crop of canning Peaches was a record, said the managing director of the Shepparton Preserving Co. (Mr. A. W. Fairley) at a dinner tendered to the Minister of Water Supply (Mr. Old) and Water Commission officials by the Shepparton Fruitgrowers' Association.

Mr. Fairley said the pack was 1,852,000 cases, being 60,000 cases more than last year's record.

The dinner was given in appreciation of the Water Commission's work during the floods.

Housing Laborers.

Cr. D. James told Mr. J. G. B. McDonald, M.L.A., when he visited a recent Council meeting, that the Chief Secretary (Mr. Bailey) had promised Mildura that he would erect buildings there, and provide water and sanitation for the housing of casual laborers, who went to Mildura for the fruit picking.

Mr. McDonald was asked if it would be possible to provide similar arrangements at Shepparton.

Mr. McDonald said he held strong views on the subject.

The men were adding to Australia's wealth, and making our primary industries possible, and he did not consider it humane that they should come to Shepparton, camp by the river, have no amenities and practically no food.

He considered they had at least shown their good faith in desiring work, and had ridden hundreds of miles to get it. So extensive had the fruit industry grown in Shepparton that it was not possible for the men to obtain their board in the town. He stated he would give all the assistance possible to obtain decent housing for these men, and would insist on the creation of a workers' encampment.

Social Visit.

Leeton Cannery Employees Visit Goulburn Valley.

A party of 23 employees of the Leeton Cannery (N.S.W.) arrived on a social visit to the canneries of the Goulburn Valley. On the Saturday, May 27, the three district canneries (Shepparton, Ardmona and Kyabram) employees engaged in a knock-out tennis tournament. At night the visitors were entertained at dinner and at a smoke social.

On Sunday morning a visit was paid to the Kyabram Cannery, and after lunch the visitors returned to Leeton.

Manager Farewelled.

Mr. Grant Leaving Ardmona Fruit Products Co-operation Ltd. for Leeton, N.S.W.

A farewell, arranged by the Ardmona Social Club, was tendered to Mr. A. Grant, who is taking up the position of factory manager at Leeton.

During the time Mr. Grant has been associated with the Ardmona Cannery as factory manager he has been instrumental in doing much for the benefit of the employees, who presented him with a gold wristlet watch.

The presentation at the evening social was made by Mr. Monk, the general manager. He presented Mr. Grant with a solid silver teapot, hot water jug and basin, the jug being inscribed "To Mr. and Mrs. Grant, from members of the Ardmona Social Club."

Mr. Grant, who was received with applause, suitably responded.

May 26, 1939.

CANNED PEACHES

1939 Production.

The following report is to hand from the Australian Canned Fruits Board showing the quantities of canned Peaches processed in Australia during the 1939 season:—

Canned Peaches—Halves.

	No. 2½'s. Cases.	No. 1's. Cases.	No. 10's. Cases.	TOTAL. Actual Number. Cases.	TOTAL. On basis of 2 doz. 30oz.cans per case. Cases.
Export Pack	623,798	89,390	11,054	724,242	722,856
Domestic Pack	154,107	4,384	—	158,491	158,491
Total	777,905	93,774	11,054	882,733	881,347

Canned Peaches—Sliced.

	No. 2½'s. Cases.	No. 1's. Cases.	No. 10's. Cases.	TOTAL. Actual Number. Cases.	TOTAL. On basis of 2 doz. 30oz.cans per case. Cases.
Export Pack	666,988	163,324	3,566	833,878	833,432
Domestic Pack	119,030	18,984	—	138,014	138,014
Total	786,018	182,308	3,566	971,892	971,446
Grand Total (halved and sliced)	1,563,923	276,082	14,620	1,854,625	1,852,796

PRESERVATION OF FRUIT JUICES.

Citrus Fruit Squashes.

Interesting Information from India.

THE FOLLOWING information has been obtained from the experimental preparation of citrus squashes (Malta Oranges and local and imported Lemons), the work being part of the research scheme on fruit preservation in the Punjab, fostered by the Imperial Council for Agricultural Research. The investigators were Lal Singh and Girdhari Lal: the report is taken from the Indian Journal of Agricultural Science, and included in the "Horticultural Abstracts" of the Imperial Bureau of Horticulture, E. Malling, Eng.

Studies in the Preservation of Fruit Juices.

Some Observations on the Preparation and Preservation of Citrus Fruit Squashes.

Indian J. Agric. Sci., Lal Singh and Girdhari Lal.

Various methods were tried and different sugar concentrations, 35 deg., 45 deg. and 65 deg. boiling strength. Storage was at room temperature for 1½ years. Citrus fruit squashes with a high sugar content, 65 deg. B, retain their fresh fruit stability and character to a marked degree.

The flavor is considerably improved by the addition of well-ground and strained peel emulsion of 2-4 per cent. fruits used for juice extraction, particularly in the case of squashes with high sugar density, whereas with low sugar content a slightly bitter, though palatable, taste is given. Preservation with sulphur dioxide gives a superior flavor to that imparted by sodium benzoate or pasteurization.

Sodium benzoate, even at its purest, gives a peculiar chemical odor resembling iodoform and a burning taste, whereas pasteurized squash has an unpleasant, cooked, flavor. Sulphur dioxide imparts a slight sulphurous odor to the freshly prepared product, which is not noticeable in the diluted beverage and disappears entirely after nine months storage at room temperature.

A suitable concentration of sulphur dioxide, well below the permitted amount, is 100-200 p.p.m. in squashes of high sugar content and this is most conveniently added in the form of potassium meta-bisulphide.

Pasteurized squash spoils in a few days after opening, chemically preserved squash will keep for some time. Squash preserved otherwise than with sulphur dioxide undergoes marked color changes after about 1½ years' storage. Rate of sediment settling is much slower in pasteurized squash than in chemically preserved squash, cloudiness still persisting in the former after a year's storage. Recipes and costs of production are included in the article.

CANNED FRUITS FOR U.K.

Increase in Minimum Prices.

The Australian Canned Fruits Board has decided to increase the minimum price for No. 2½'s Peaches (halves and sliced), seconds grade, by 1½d. per dozen cans, i.e., to 5/9 per dozen c.i.f. United Kingdom Conference ports.

This increased price operates forthwith, and all United Kingdom agents of exporters have been advised.

The arrangements verbally entered into by canners to limit their sales of seconds grade canned fruits in the United Kingdom to 10 per cent. of the aggregate sales of all varieties and grades, has now been suspended indefinitely, by agreement between the canners concerned.

CANNED FRUITS—(Continued).

Berry Fruits for Canning

New Varieties Tested in Tasmania

NEW VARIETIES of berry fruits, which have been cultivated at the Government Experimental Plot at Kettering, Tasmania, were recently subjected to expert sampling at the office of the Minister for Agriculture (Mr. R. Cosgrove), when processed products were tested by those interested in the industry.

Those present included Messrs. H. Thompson and D. Morgan (H. Jones & Co.), J. P. Piggott (Port Huon Fruitgrowers' Co-operative Association), D. E. Ryan (State Fruit Board), C. Knight (Small Fruits Committee), P. A. Phial (Sugar Concession Committee), E. Dean (Tasmanian Producers' Organisation), H. C. Smith (Secretary for Agriculture), S. R. Adams (manager of the Agricultural Bank), P. H. Thomas and T. Raphael (Horticultural Division, Department of Agriculture).

The arrangements were made by Messrs. H. Jones & Co., and the Port Huon Fruitgrowers' Co-op., the idea being to get an expression of opinion as to the palatability of the processed berry fruits.

There was general agreement that some of the varieties cultivated at the experimental plot were superior to those now grown in Tasmania.

The "Youngberry," in the opinion of most, had a more delicious flavour than the Loganberry. It is a fine sample of fruit, and has much of the taste of the Mulberry. The Lord seedling in **Gooseberries** also came in for much favorable comment, and the Goliath variety was, by mutual agreement, voted superior to most of the types of **Black Currants** now grown in Tasmania.

There were also varieties of **Red Currants** and **Raspberries**, which were favorably commented on, and a **new type of Peach**, which, it was stated, would be most suitable for Tasmanian conditions, also found favor.

The Minister announced that arrangements would be made for a visit to the experimental plot at Kettering when the fruit was out in November.

Messrs. Thompson and Piggott expressed appreciation of the action of the Government in having the samples of imported berry fruits processed to ascertain the most suitable varieties. They paid tribute to the work of the Horticultural Division of the Department.

CANNED FRUIT PACK.

Australia's pack of canned Apricots, Peaches and Pears totalled 2,708,000 cases, as compared with 3,030,000 cases for the 1938 season. The Peach pack of 1,852,000 cases was a record, as against 1,790,000 cases for 1938. The Pear pack was 573,000 cases (860,000 for 1938), and the Apricot 282,000 (380,000).

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THE PRESENCE OF TIN IN CANNED FRUITS AND VEGETABLES.

Not Harmful to Health.

(By W. B. Adam and G. Horner, in annual report of the Fruit and Vegetable Preserving Station, Campden.)

The authors, after discussing previous work on the subject of tin contamination, note the improvements made in the container by lacquering. They give tables showing the tin content of a number of canned fruits stored at different temperatures in plain and lacquered cans for different lengths of time.

They consider that previous work has shown that the risk of chronic tin poisoning from canned food is extremely remote. Their own figures show, however, that fruits and vegetables in lacquered cans seldom nowadays contain more than 40 mg. tin per kg. even after long storage (which is very far below any possible danger limit.—Ed.) This is the figure for total tin in the product but the amount of soluble (i.e. the important) tin is unlikely to exceed half these amounts. **Modern developments disclose a possibility of further reducing tin content almost to nil.**—"Horticultural Abstracts."

TINNED PLATE MANUFACTURE.

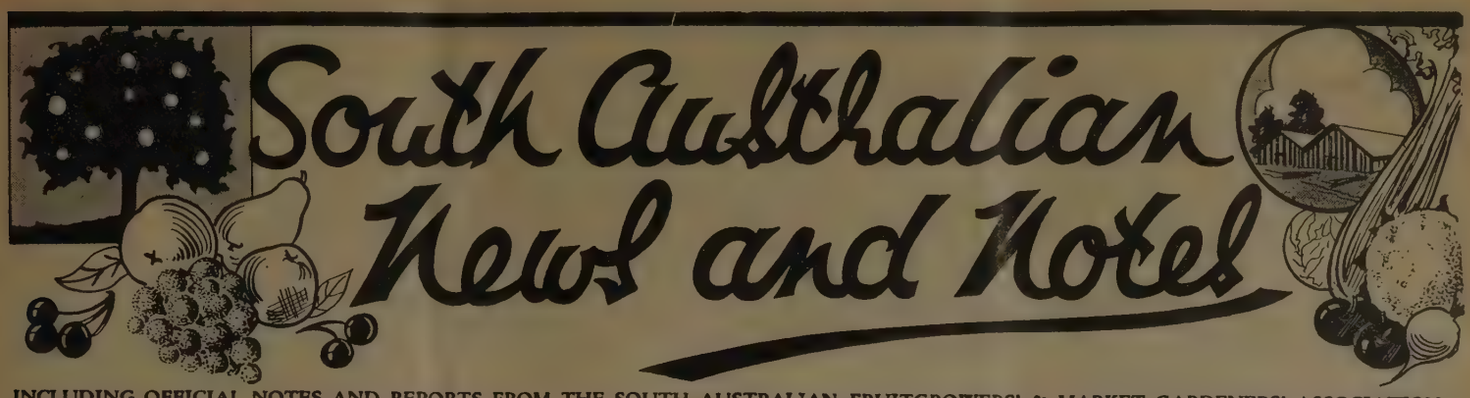
New Australian Industry.

THE Prime Minister (Mr. Menzies) recently informed Parliament that the project proposed by the Broken Hill Proprietary Co. Ltd. would involve capital expenditure of from £2,500,000 to £3,000,000 in the tinned plate plant alone, and substantial additional outlay for auxillary services. It is estimated that the new industry will afford employment to 1,000 men directly, and to an appreciable number more indirectly in the mining, steel and transport industries.

Successive Commonwealth Governments have been anxious to see this great industry established in Australia as this is so essential for the canning of foodstuffs and a large number of other commodities. Up to the present the whole of our canning requirements have been imported. An enquiry is being opened to discover whether assistance should be given and in what form. The Government expects to receive the Tariff Board's report in about eight weeks' time.

CANNED FRUITS AND VEGETABLES IN CANADA.

The fruit and vegetable preparations industry, which includes canned fruits, canned vegetables, pickles, vinegar, jams, etc., comprises another large division of this group. In 1936 this industry reported an output valued at 47,337,397 dollars, a capital investment of 41,572,514 dollars, and an employment of 9,258 persons, who received 6,066,761 dollars in salaries and wages. The industry has made rapid strides in the past few years. During the period 1923-36 the volume of fruit and vegetable preparations produced increased 200 p.c. This growth is remarkable indeed, as it represents a corresponding increase in the domestic demand for these products, the foreign trade being relatively small as compared with the domestic production. Imports in 1936 were valued at 3,444,665 dollars and exports at 5,406,824 dollars.



INCLUDING OFFICIAL NOTES AND REPORTS FROM THE SOUTH AUSTRALIAN FRUITGROWERS' & MARKET GARDENERS' ASSOCIATION.

The South Australian Fruitgrowers' & Market Gardeners' Association Incorp.

MAY EXECUTIVE MEETING

THE May meeting of the Executive Committee of the S.A. Fruitgrowers' and Market Gardeners' Association Incorp. was held in the Committee Room, 288a Rundle-street, Adelaide, on May 26, 1939, at 10.30 a.m.

The President (Mr. W. J. Bishop) occupied the chair, and those present were Messrs. H. B. Robson, W. H. Ind, J. B. Randell, C. W. Giles, C. H. Ragless, H. N. Wicks, G. Lifton, S. M. James, G. J. Strange, H. Parsons, R. Hunter, J. Turner, R. A. Cramond, E. Giles, A. O. Petersen, G. H. Schultz, H. H. Schultz, M. J. Vickers, and the Secretary.

Apologies were received from Messrs. L. J. Wicks, M. Packer, G. T. Pitt and N. T. Hobbs.

Correspondence: Engineering and Water Supply Dept. advising that the natural flow will be allowed to pass down the River Torrens between October 15 and April 15 of each season. Received.

Banana Marketing Board of N.S.W. Received.

Department of Labour, Melbourne, with reference to the Saturday afternoon closing of Melbourne fruit shops.

Mr. G. Marks, Secretary Annual Licensed Blockers, Barmera, expressing appreciation for granting them an affiliation. Received.

Sectional Reports.

Celery: Mr. G. J. Strange reported on the activities of the Celery Section.

Apple: Before calling on Mr. M. J. Vickers to report on behalf of the Apple Section, the President congratulated him on being appointed the Growers' Representative on the Apple and Pear Export Control Board. The President also expressed appreciation of the fine service done the industry by the Apple and Pear Council, and by Mr. J. B. Randell, who had represented South Australian growers on the Council.

Mr. Vickers suitably acknowledged the congratulations and requested the co-operation of all Apple growers. He then reported that Apple prices had been revised and increased prices on the local market would operate from Monday, May 29.

Citrus: Mr. W. H. Ind reported that the annual combined meeting of Torrens Valley and Salisbury citrus growers would be held at Salisbury on Monday evening, May 29, 1939.

National Insurance: Mr. J. Turner again brought forward for discussion the proposed measure of National Insurance. After discussion, Mr. C. W. Giles moved "That action be deferred until such time as information is available concerning the policy to be adopted by the new Federal Ministry." Seconded Mr. W. H. Ind.

Amendment: Mr. R. Hunter moved as an amendment "That this Association notify each South Australian Member of the Federal Parliament that it unanimously objects to any measure of National Insurance along the lines advocated. Seconded Mr. G. Schultz. The motion was defeated and the amendment duly carried.

Mr. W. Ind moved "That we endeavour to contact leading Associations of Primary Produce in the various States concerning their views on National Insurance." Seconded Mr. R. Hunter. Carried.

MARKET NOTES

Trading on the Adelaide markets during May was very dull, due to abnormal supplies of vegetables. Consequently prices were exceptionally low.

The present state of the markets is a direct contrast to that prevailing during the early part of the year, when supplies were short and prices high.

Since the disastrous heat wave in January growing conditions have been ideal, resulting in excellent growth, and glutting the markets.

Cabbages, Cauliflowers and Beans and most bunch vegetables have been in exceptionally heavy supply, and despite the excellent quality had to be practically sacrificed to obtain a clearance.

However, during the last week of May a shortening in supplies of Cauliflowers and Beans resulted in improved price levels.

Potatoes and Onions, on the other hand, remained at a stable price throughout the month, but at present have an easing tendency.

Celery has also responded to the kindly weather conditions, and both local trade and export quantities increased greatly.

Fruit supplies, as a contrast, are on the light side, and as a result price levels showed very little variation for May.

Apple supplies ex sheds have been practically depleted, owing to this season's light crop, and as cold store fruit is being drawn upon, prices have shown increases.

The undermentioned quotes operated on the markets 26/5/39:—

Beans, 2/6 doz. lbs.; Beetroot, 1/- doz. bunches; Cabbages, 3/- doz.; Carrots, 1/6 doz.; Cauliflowers, 3/- doz.; Celery, 3/- doz. hds.; Leeks, 2/- doz.; Lettuces, 1/- doz.; Onions, 20/- to 22/- cwt.; Parsnips, 2/- doz. bunches; Peas, 3/6 bush.; Potatoes, 11/- to 12/- cwt.; Rhubarb, 1/- doz.; Trombones, 4/- to 5/- cwt.; Turnips, 1/- doz. bunches; Swede Turnips, 1/6 doz. bunches.

Apples: Delicious, 10/- case; Granny Smith, 7/- case; Jonathans, 8/- case; Cleos., 7/- case; Romes, 5/- case; Buncombe, 6/- case. Bananas, 26/- to 28/- crate; Lemons, 6/- to 7/- case.

Oranges: Navels, 8/- to 9/- case; Mandarins, 10/- case; Grapefruit, 8/- to 10/- case. Pears, 10/- case; Quinces, 5/- case; Persimmons, 3/6 to 4/- half case.

FEDERAL APPLE AND PEAR EXPORT CONTROL BOARD.

South Australian Growers' Representative.

Mr. M. J. Vickers Appointed.

OPPORTUNITY was taken at the May meeting of the Executive Committee of the S.A. Fruitgrowers' and Market Gardeners' Association Incorp. to congratulate Mr. M. J. Vickers, of Lenswood, on the announcement of his appointment as the South Australian Apple Grower Representative on the Federal Board under the Apple and Pear Organisation Act.

Mr. Vickers' wide experience in the Apple industry, both at home and abroad makes him an ideal man for the position.

He was born at Lenswood, S.A.—an Apple growing district—and on leaving school worked on his father's up-to-date Apple orchard, but at a young age the call of adventure was strong, and he set off on a push bike, travelling through Victoria and New South Wales by this means of transport.

He then boarded a boat at Sydney, and worked his passage to New Zealand, where for some time he worked in both Islands, gaining invaluable experience in the growing and marketing of fruit. Soon after his return to the mainland Mr. Vickers enlisted with the A.I.F., and served in France through the duration of the Great War. On leave he visited England, Scotland, and Ireland, also Italy, and on the return journey to Australia spent two weeks in South Africa.

Returning to Australia he settled at Lenswood, fruitgrowing on his own account, but the desire to study the various methods applied in other countries regarding fruitgrowing soon found him on a six months' tour of the United States and Canada, also New Zealand.

Another trip was made to Japan and China ports, and still another to Java. Both the latter trips gave him an extensive knowledge of potential markets.

Two years ago he made a tour of the United Kingdom and the Continent. While in England he attended sales of Australian Apples at Covent Garden, and observed fruit from the time of arrival to sale by retailers.

Mr. Vickers is therefore not only well versed in the production of Apples, but also has first-hand knowledge in the methods employed in the marketing of the fruit.

His last tour did not take him outside the shores of his own country, but it was perhaps the most comprehensive of all, around Australia by car, when over 11,000 miles were travelled.

Despite all his wanderings, and the working of his fine orchard, Mr. Vickers still finds time to be a very public spirited citizen, and we find him to be Chairman of the Onkaparinga District Council, President Onkaparinga Sub-Branch of R.S.S.I.L.A., Chairman of Directors of Lenswood Cold Stores, and Chairman of the Apple Section of the S.A. Fruitgrowers' and Market Gardeners' Association. He also evinces a great interest in the activities of Agricultural Bureaux.

On reviewing his experience and qualifications, South Australian Apple and Pear Growers must feel confident that their interests are not only in the hands of a very capable, but also a very determined man.

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AUSTRALIAN DRIED FRUITS.

A report to hand from the Commonwealth Dried Fruits Export Control Board advises that 54 tons of new season's Currants averaged £36/11/8 per ton in recent sales in Britain. New season's Sultanas will shortly open. Meantime 22,569 tons of dried fruits have been shipped to the United Kingdom, the great bulk of which is afloat. Total shipments to all markets for the season to date amount to 33,247 tons.

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Importance of Power Alcohol

Creation of Wartime Fuel Reserve

Outlet for Grape Surplus

BARMERA, May 24.

POWER alcohol manufactured as an outlet for surplus fresh and dried Grapes, to give stability to the viticultural industry and to provide a valuable fuel reserve in time of war, formed one of the main subjects for discussion at a conference here to-day of the River Murray Branch of the Agricultural Bureau.

It was pointed out that the production of power alcohol could be rapidly expanded in an emergency, when it would be difficult to absorb the normal output of wine and dried fruits through the usual channels. Substitute fuels to take the place of imported oil were also discussed, particularly producer gas.

The conference was presided over by Mr. E. D. Sims. The opening address was given by Mr. J. B. Murdoch, of the Advisory Board of Agriculture, who said that efficiency would solve problems rather than production.

Speaking on behalf of the Minister of Agriculture (Mr. Blesing), the General Secretary of the Bureau (Mr. H. C. Pritchard), said that the Government was determined to remove Water Hyacinth from the Murray.

Power Alcohol Position.

"Surely an industry with a capital investment of £15 to £20 million, giving a living to from 24,000 to 30,000 persons, employing about an equal number, and exporting goods to the value of £3,000,000 annually, is worthy of encouragement?" said Mr. D. T. Durieu, in an address on power alcohol. "To-day we find that new markets for Grape products must be found, or a serious position may develop, not only in regard to wine Grapes, but also to sub-standard dried fruits. In Queensland, sugar alcohol is compulsorily mixed with petrol, and the price is ½d. a gallon above that in other States. From the point of view of defence, Australia is badly situated for fuel, and in time of war, a power alcohol industry would be of great value. Other nations are concerned with this aspect of fuel supply."

Mr. Durieu said that with the help of the Commonwealth Government and the co-operation of petrol companies, it would appear that some stability could be assured the Grape industry, if the surplus dried fruit alcohol, and fortifying spirit, could be sold with petrol. Production would have to be controlled with legislative action against further plantings. Even with existing areas improved cultural methods were increasing yields, and adding to the pressure on the existing outlets. Alcohol gave satisfactory results as a mixture with petrol, and it would be preferable that a fixed quantity should be supplied to the oil companies each year.

Wine makers could regulate their wine output if there was a definite outlet for surplus spirit, and the need for quitting wine stocks at uneconomical prices would be obviated. This would stabilise the industry and give security to Grape growers, while the costly distillation plants—a great asset in time of war—would be assured of continuity of operation, and the disposal of their product. Assuming that the industry would eventually have a surplus of 500,000 gallons of liquid spirit, valued at £187,500, under the present Australian petrol consumption it would mean an admixture of .177 of a gallon of alcohol to each 100 gallons of petrol, costing an additional .159 pence a gallon. Alternatively, a remission of £187,500 of duty to petrol importers would not cost the Federal Government as much as the revenue from brandy excise.

Mr. Durieu concluded by saying that in time of war it would be difficult to export wine or dried fruit and in those circumstances the present establishment of a power alcohol industry would give an outlet for the Grapes, and provide an urgently needed substitute petrol.

Mr. M. J. Herbert also spoke on power alcohol, and said that many countries encouraged it by subsidies, or legislation compelling its use. Many objectives would be attained if the Commonwealth Government purchased all surplus fortifying spirit, and stored it in central depots, where it could be kept as a reserve for a national emergency, or released from time to time for fortifying wine, or for industrial uses. Under any other plan, the cost to taxpayers in all States affected must exceed £50,000, and for this sum 260,000 gallons of proof spirit could be bought at bounty prices, which would be enough to relieve any congestion.

Alternative Fuels.

Alternative fuel supplies were discussed by Mr. H. S. Denman, of Barmera, who said that Australia used more than 300,000,000 gallons of imported oil fuel annually and as storage was limited, a wartime blockade would largely paralyse industry and transport. Producer gas offered the best solution to the problem. Prices for conversion sets ranged from £80 to £100, and the plant weighed about 2 cwt. Fuel cost about £2/10/- a ton at Barmera, and as 12 to 14 lb. of fuel did the work of a gallon of petrol, there was equivalent to 3½d. a gallon for liquid fuel. France, Italy, Germany, Russia and Japan had conducted satisfactory trials. Producer gas plants could be bought for £45 (Australian). The only disadvantages of gas plants had been overcome, and they were now suitable for touring cars, as well as for tractors and utility vehicles.

As Diesel engines were so much more efficient than petrol, and the fuel so much cheaper, and safer to store, it was surprising that the Federal Government activity discouraged Diesel engines, Mr. Denman said. For example, a Diesel engine quoted at £220 f.o.b. in England cost £550 here, including exchange, sales tax, and duty. There was a duty of 66 per cent. on high speed Diesels of under 100 h.p., apparently because the authorities

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feared the inroads these engines would make into petrol tax revenue. However, in England, where the duty on Diesel fuel was the same as for petrol, Diesel engines were making striking progress.

Position of Growers.

Mr. F. B. Harden, of Waikerie, gave an address on the dried fruits industry, which, he said, was not a prosperous one for the growers, whose arrears of rent, interest, and capital repayments amounted to £680,000 on June 30, 1938. This did not include capital repayments still to become due, and outside liabilities. Consequently, growers' equity in the settlements was small. He also criticised various aspects of the management and control of the industry, and the sale of its products.

Commenting on the paper, Mr. Murdoch, who is a member of the A.D.F.A. and Commonwealth Export Control Board, said it bristled with inaccuracies. The growers were as well, or better, off than any other section of primary producers, and were better organised. Official inspection and grading standards were vitally necessary, as there was chaos before regulations were introduced. The annual sale of 17,000 tons to Canada depended on grading, as the sale was made subject to grade. Distributing costs, apart from retailers' profits, were 16 per cent., and growers received 60 to 70 per cent. of the retail price, and not only 25 per cent., as stated.

Mr. L. W. Andrew, of Waikerie, spoke on the work of the C.S.I.R., with particular reference to research affecting the irrigation areas.

Immature Oranges.

In a discussion on the marketing of early Oranges, it was stated that the sale of immature fruit given a good color by gassing, was prejudicing the sale of ripe Oranges when the latter came on the market. A resolution was carried, stating that the conference deprecated the marketing of immature Oranges, and requested action by the Department of Agriculture. Resolutions were also carried expressing approval of investigations by the Advisory Board of Agriculture into fruit juice production, and asking that a barograph be installed at Berri to enable more weather information to be given regarding the Upper Murray.

Mr. C. Schultz, of Barmera, read a paper on car tractors, which he said were heavy, powerful cars, bought cheaply, and adapted for tractor use by shortening the chassis, strengthening the power drive, and lowering the back axle gear ratio. Car tractors, he claimed, were faster than horses, and more economical, particularly if fitted with a vaporiser, for working on kerosene. Any ordinary block implements could be fitted, and the purchase and conversion of suitable old cars could be carried out for about £50.

In the evening, Mr. E. Leishman, of the Horticultural Branch, gave a talk on insect pests of the Murray. — "Adelaide Advertiser."

An Australian and an American were having an argument as to who owned the biggest ship. Said the American: "Over in America the ships are so big that stewards have to go from one room to another in motor-cars."

"Oh," said the Australian, "that's nothing. Here in Australia some of the ships are so big that the chief cook has to go through the stew in a submarine to see if the vegetables are cooked."

SOUTH AUSTRALIA (*Continued*)

Mid-Murray Notes

DITCHING IN PROGRESS — COVER CROPS PLANTED AND EFFECT ON SOIL — SUPERPHOSPHATE EXAMINED AFTER TWO YEARS — MR. LYON TO ISSUE A PRE-HARVEST REPORT EACH YEAR, STATING WHEN PICKING SHOULD COMMENCE — ROOT STOCK CITRUS STUDIES CARRIED OUT BY DR. JOAN HEARMAN — FORETELLING NEXT SEASON'S CROP — ANNUAL CONFERENCE OF RIVER MURRAY BRANCHES OF THE AGRICULTURAL BUREAU — CONSTRUCTION OF CAR TRACTORS — ECONOMY IN USE OF POWER ALCOHOL — ZINC APPLICATION FOR NEMATODE AFFECTED VINES — EFFECT OF SOIL ON ROOT STOCK — IMMATURE ORANGES FOR EARLY MARKETS.

(By Our Correspondent.)

Renmark, 22/5/39.

NOW THAT THE FRUIT has all been harvested and the distilleries and wineries have closed down, many growers have gone for a well-earned, brief holiday.

Ditching.

Those who remain are busy ploughing every alternate row in preparation for ditching these rows to take the cuttings pruned off the vines. This ploughing is done towards the vine, leaving a hollow in the centre and after getting down as deep as possible with the ordinary single furrow plough, the finished ditch is made by means of a special ditching plough.

As this is a costly implement for one operation, the ordinary grower cannot afford to buy one, but to meet the situation the Renmark Fruit Growers Co-operated—always out to assist its members—has purchased several of these ploughs and hires them out to growers at a nominal cost. Both the horse-drawn and tractor types of ploughs have been purchased, and are freely used at this time of the year.

The object of ditching is devised not only to get rid of the cuttings but to act as a kind of sub-soiling operation at the same time. The alternate row is planted with a **cover crop**, so that every other year a row is ditched. The ditched row is also planted with **Tares**, sometimes with **Barley**, and occasionally with **Peas**.

In some instances Tares planted at this time of the year mature too late in the Spring to be of the best value.

Soil types determine the nature of the cover crop to be planted in the ditched row. On the heavy types, Tares dry out the soil, but on the lighter types, in localities where subsoil water has accumulated, the effect of Tares become a valuable asset in using up part of this accumulation.

Owing to the necessity of getting our phosphatic manures as deep into the soil as possible, a goodly dressing of superphosphate is put down into the bottom of the ditch.

Action of Superphosphate.

An interesting point cropped up some little time ago regarding the effect of placing super. at the bottom of the ditch.

A grower brought me some super. which had been ploughed up after being left undisturbed for two years. **To all appearances it was exactly in the same condition as when it was put in. However, on having the sample analysed it was found that only 5 per cent. of total phosphates remained in the residue out of a total of 45 per cent. when the super. was applied two years previously, showing that the phosphate had gone into the soil and would remain until used by the vine.** The highest analysis of the residue comprised lime sulphate (gypsum).

By applying superphosphate as deep as possible in the soil we can be assured that it will not revert to an insoluble form by the action of our highly alkaline soils.

C.S.I.R. Meeting.

While recently attending a meeting of the Advisory Committee of the C.S.I.R. Research Station at Merbein, under the directorship of Mr. A. V. Lyon, M.Ag.Sc., two distinguished visitors were welcomed, in the persons of Sir David Rivett (Deputy Chairman and Chief Executive Officer of the C.S.I.R.), and Dr. Barnard (Research Officer attached to the Horticultural Division, Stationed at Canberra). Mr. D. C. Winterbottom welcomed the visitors and members of the committee, some of whom had to come nearly 200 miles to attend, and it was pleasing to note that a full committee was present on this occasion.

Sir David Rivett expressed his pleasure at being present, and to compare the working in the present up-to-date equipped laboratories with the disabilities experienced by the staff while working for years in improvised quarters, and with ill-equipped apparatus. Furthermore, he appreciated the work of the Advisory Committee, whose criticism and advice proved of great value to the executive officers.

Pre-Harvest Advice.

The Committee appreciated the pre-harvest advice tendered by Mr. A. V. Lyon after his study of the condition of the fruit. Early in February Mr. Lyon advised growers to commence Sultana picking earlier than usual owing to the fact that the excessive heat had hastened maturity and that to delay picking would cause a rapid breakdown in the fruit.

The Research Station officers had followed this advice, with the result that 30 tons of 4-crown fruit had been harvested. Over 80 per cent. of the fruit harvested at the Research Station was off the racks when the disastrous rains occurred.

In the light of these circumstances, the Committee passed a resolution to the effect **that a pre-harvest survey of the fruit condition should be made by Mr. Lyon every year, and a report tendered for publication in the press of the irrigation areas.**

Other matters discussed were the reconstruction of the old Sultana vineyard on a T trellis system, study of citrus problems, drainage matters, practices of disbudding of Currants, killing weeds by chemical means, and the advisability of sending Mr. Lyon abroad.

Dr. Barnard gave an outline of the work being done at the Griffith Research Station by Dr. Joan Hearman on **root stock citrus studies.** In the course of his short address Dr. Barnard believed that the biggest contributing factor in the decline of citrus trees in Australia was bound up with unsuitable root stock. As the citrus tree was a composite one, it was of the utmost importance to obtain a perfect affinity between the root and branch, and with this end in view they were working on various types of root stocks at Griffith. Although the climatic conditions at Griffith would differ from those on many citrus growing localities, Dr. Barnard believed that the work being done at that Station would benefit the whole industry.

At the conclusion of the meeting, an inspection was made of the drainage plot in progress of construction.

Mr. Lyon passed through Renmark on Saturday last and examined some of the Sultana vines on my block, which had partly been defoliated during the intense heat wave, but subsequently started fresh growth after the application of an irrigation.

On surface appearances it was not clear whether the buds which should normally have developed into fruiting buds had developed or whether the accumulation of carbo-hydrates were dissipated in producing new growth. A sample of buds will be submitted to Dr. Barnard for microscopical observation.

Previous research work on the development of fruiting buds in Sultana vines by Dr. Barnard have been so exacting that it is now possible to foretell this Winter to within 5 per cent. of the potential crop at bud burst for next year. By obtaining a forecast of the possible crop growers will be in a position to vary their pruning practices to allow for possible crop variation. In a year when a low percentage of fruitful buds develop it might be necessary to leave more Sultana canes than in a year when fruitful buds are plentiful.

Mid-Murray Conference.

On May 24 the annual conference of River Murray Branches of the Agricultural Bureaux was held at Barmera.

In the absence of the Minister of Agriculture (The Hon. P. Blesing), the conference was formally opened by Mr. J. B. Murdoch (Member of the Advisory Board of Agriculture). Mr. Eric Sims (Chairman of the local branch) occupied the chair.

Many officers of the Agricultural Department were present to reply to questions, among whom were the following:—Mr. E. Leishman (Acting Chief Horticulturist), Mr. H. C. Pritchard (General Secretary for Agricultural Bureau in S.A.), Mr. F. Arndt (Horticultural Adviser), Mr. Grasby (Horticultural Adviser), Mr. Halliday (manager of the Berri Experimental Orchard).

"Car Tractors."

The first paper to be read was that given by Mr. C. Schultz, the subject being "Car Tractors."

In dealing with the subject, Mr. Schultz gave detailed particulars of how to go about constructing a tractor suitable for orchard work from any type of heavy car, such as Buick, Hudson, Dodge, etc.

The construction consists of shortening the wheel base by cutting down the chassis. The ordinary car has necessarily to be geared lower than the lowest gear usually employed, so that adjustments have to be made to bring the gears to a ratio of not less than seven to one.

Many of these car tractors have been in use for years and have given considerable satisfaction.

Mr. Schultz said that provided a second-hand car in reasonably good condition could be purchased for £30 it would cost about another £20 to get the car cut down and have hoists attached for lifting the implements. Any of the horse-drawn implements could be used if altered slightly, such

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A sturdy, strong plow equipped with reversible discs to enable the operator to plow up to, or away from the trees. Operated by a single lever and with nothing to catch branches of trees. To facilitate the movement of the plow around the orchard the discs are movable and lift clear of the ground.

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ARE YOU GRUBBING?

Previous experience had convinced me that to be really efficient a grubbing machine should have ample power and ropes that will meet the heavy demands required of them. I found that shovel and axe work is very costly either by itself or in conjunction with a machine. The machine that offered these features with a host of others, was **THE "MONKEY" GRUBBER.**

It gave me the power of 260 pairs of hands in a simple and compact form; the lever is short, so that I am able to stand firm-footed and get the full stroke. There are two speeds in the machine, as well as an automatic release that allows me to let off a strain, or as the machine will work in any position, it comes in for all jobs that would require a chain block. It is taken to the job on a pair of wheels like a barn truck, and is rigged for work in a few minutes. The ropes are in lengths that I find easy to handle, and each one is fitted with hook and loop couplings, so simple and absolutely IT for effectiveness. The makers have included a sturdy snatch block with a novel method of securing to the ropes, and also a fine type of firm gripping rope shortener. The latter makes it very easy to accommodate the lengths of rope to the tree or stump being pulled, and is quickly released from the rope. The combination of so many time and labor saving features makes the "Monkey" Grubber a superior grubbing outfit.

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as extra discs being attached to the ordinary disc implement. Mr. Schultz said that this type of car tractor has plenty of power to do all the work asked of it on the ordinary holding.

Mr. D. T. Du Rieu (Chairman of the Renmark Growers' Distillery) gave a paper on

"Power Alcohol,"

in which he dealt at length with the possibility of utilising the low-grade dried fruits and surplus proof spirit now in Australia for the purpose of manufacturing into spirit suitable for blending with petrol.

The speaker said that in these unsettled times we may find ourselves cut off from the ordinary channels of petrol supplies, and in such a case of national emergency every avenue of power alcohol should be exploited.

Mr. Herbert, of Moorook, backed up the remarks of Mr. Du Rieu, and said that nearly every country in the world, not possessing natural supplies of petrol, had found it necessary to make an admixture of power alcohol with petrol with a view to eventually becoming more or less independent of outside supplies. The manufacture of power alcohol was rapidly increasing every year.

Mr. H. S. Denman read a paper on the subject of

"Alternate Fuel Supplies."

The speaker said that as Australia uses more than 300 million gallons of liquid fuel per annum or nearly one million gallons per day, it shows how dependent we are on overseas supplies of liquid fuel to keep the wheels of industry turning.

Of the various alternatives to using imported liquid fuel, Mr. Denman thought the most promising was to be found in the use of producer gas. In making a comparison of costs between petrol and producer gas for running cars, the speaker said that he had seen a Ford Model A car which had run 1,500 miles on producer gas for a cost of 15/- for fuel.

Mr. Denman said that France, Italy, Germany, Russia and Japan had conducted extensive trials over thousands of miles with this form of fuel for internal combustion engines and attained a great degree of success. He considered that the matter was very much neglected in Australia.

"Last year," he said, "Several farmers from the West Coast did a 2,000-mile trip to the Northern Territory on producer gas, and the method adopted was to cut wood on the way and convert it into charcoal when supplies ran short.

In European countries concessions are given to users of producer gas and plants are constructed by mass production, the price of which is about £45 Australian currency. Mr. Denman had seen home built plants using charcoal made on the farm in all parts of the State. Charcoal could be made from Mallee stumps, old gum logs, Mallee wood and almost any other type of wood. **The comparative cost was equivalent to 3½d. per gallon for producer gas as against 1/8 for petrol and 1/1 for kerosene.**

Mr. L. W. Andrew gave an address on "Science and the Industry."

Mr. Andrew is one of the South Australian members of the Advisory Committee of the Merbein C.S.I.R. Research Station, and was in a position to outline the work which has been done and which is being done by the scientist to help the practical man on the land.

Mr. F. B. Harden read a paper entitled "A Realist View of the Dried Fruit Industry."

Other subjects which came up for discussion were "Oil Spotting of Citrus," and "The Dying Out of Vines in Certain Areas."

On this latter subject Mr. F. Arndt said that on making an investigation on a badly affected area he had found

SOUTH AUSTRALIA—(Continued).

vines badly attacked with nematodes, which, in his opinion, caused their death. **As no specific cure was known for nematodes, a trial was being made with zinc application owing to the success achieved on nematode affected citrus trees.**

"Root Stock for Citrus" came up for discussion. Mr. Grasby said that no definite recommendations could be made on this matter, as the subject was bound up to a great extent with soil types. In his opinion, however, the Sweet Orange stock appeared to give the best all-round results.

The subject of sending immature Oranges to the early market came up for strong criticism, and a resolution was passed condemning the practice, together with a request to the Department of Agriculture to take steps to remedy the evil for future years.

In the evening Mr. E. Leishman gave a lantern lecture on "Insect Pests Found on the River Murray," and dealt with every form of insect pests, some of which are only too well known by growers as unwelcome visitors.

It was decided to hold the next annual conference at Moorook. —"Nemo."

THE SOUTH AUSTRALIAN FRUIT MARKETING ASSOCIATION.

THE monthly meeting of the Executive of the S.A.F.M.A. was held at Adelaide on May 26, 1939.

Present: Messrs. J. B. Randell (Chairman), A. O. Petersen, R. Fowler, H. N. Wicks, F. F. Redden, P. R. B. Searcy, R. G. Hannaford, W. W. Miller, F. B. James, L. J. Bishop, R. A. Cramond, M. J. Vickers, S. M. James, R. H. A. Lewis, G. Quinn.

Correspondence was received from the Australian Apple and Pear Council re insurance, publicity, export, etc.

Research Sub-Committee: Mr. H. N. Wicks reported that at the meeting of the Research Sub-Committee a discussionu had been initiated by Mr. M. G. Basey on the subject of "Cover Crops," and he considered that the introduction of these monthly discussions would greatly increase the value of the work of the Research Sub-Committee.

Australian Apple and Pear Board: The Chairman congratulated Messrs. M. J. Vickers and P. R. B. Searcy on their appointments as the South Australian representatives on the newly-formed Apple and Pear Board. He hoped that the Board would function satisfactorily and achieve good results for the benefit of the industry.

Mr. Searcy responded and thanked members for their congratulations. He stated that he would endeavour to assist the industry in South Australia in every way possible, and would welcome suggestions from members of the Association which would be of assistance to Mr. Vickers and himself at meetings of the Board.

Mr. Vickers also asked for the co-operation and support of the Association, and stated that he would work in close co-operation with Mr. Searcy, and they would use their best endeavours in the interests of all connected with the industry in this State.

NEW VARIETY.

Waiter: Would you like to try our windmill soup, sir?

Diner: Windmill soup? What's that?

Waiter: You get some if it goes round.

QUESTIONS AND ANSWERS.

Troublesome Grasses :: Vine Cuttings or Rooted Vines? :: Apricots and Nectarines :: Budding and Cincturing Citrus.

AT A RECENT meeting of Murray River fruitgrowers, held at Ramco (South Australia) recently, questions were answered by the District Horticultural Adviser (Mr. C. G. Grasby) as follows:—

How to get rid of Johnson Grass growing amongst vines?

Trench ground to depth of 3 ft. to get to roots and remove all root particles. Mention was made of new spray material—"Aetlacide"—which might be useful. Cut down and spray new growth.

Which best to use—Vine cutting or rooted vine?

Depends on moisture in soil. If cutting was planted early, provided moisture was there, the cutting was as good as a rooted vine. Both start growth evenly and cut back same to start again and if conditions were suitable would get even growth.

Mr. Lewis considered that irrigations were so far apart that, if planted, cuttings would die out.

Mr. J. Boehm had planted cuttings —Sultana and Gordo—deep with a crowbar, and they did well.

Mr. C. Curtis considered cuttings did best every time.

How to prune Apricot tree to make it furnish at bottom?

Mr. Grasby advised reducing top for some distance and force out growth.

Mr. C. Boehm said some Apricots may be weak and the fruit would go to the top.

Mr. Lewis mentioned a seedling tree of immense size, pruned regularly, with a tendency to have no fruit at the bottom but a mass of growth at top. Was advised gradually to cut top back and induce growth.

A nectarine tree with little fruit at bottom—Why?

These particular trees amongst Oranges, were of too upright growing nature, resulting in the sap flowing to highest point—if of spreading nature would save flow to top. Orange trees also caused absence of light.

How to get rid of River Grass in vines,

Use fork hoe and elbow grease. Remove from under vines and keep exposed to sun. Mr. Grasby instanced a block at Moorook which some years ago was infested with a mass of couch grass. To-day there were only two little patches in the whole block. Through the efforts of the owner in hoeing from under and keeping soil stirred between rows.

How to get rid of water weed or summer grass—cannot get plough or Grape hoe to look at it and it grows well in summer time?

This is distributed by seed and germinates readily. Constant hoeing was needed.

Mr. C. Curtis advised using push and pull hoe and keeping at it, especially on a hot day.

Mr. J. Boehm suggested getting a set of harrows into it, but under the vines use the hoe.

When is the time to bud citrus?

Early spring or early autumn. First will give immediate growth which will continue. Second, a dormant bud through the winter which will grow in spring. Portion above bud must be removed—say 6in.—which can be used to support growing bud, but that portion must not have any buds to grow.

Reason for horse fed on lucerne chaff with salt lick eating bark off posts?

Answer from Government Veterinary Officer:—Either (1) lack of sufficient work; (2) lack of lime or phosphates.—(S.A. Jour. Agric.).

SOUTH AUSTRALIA.

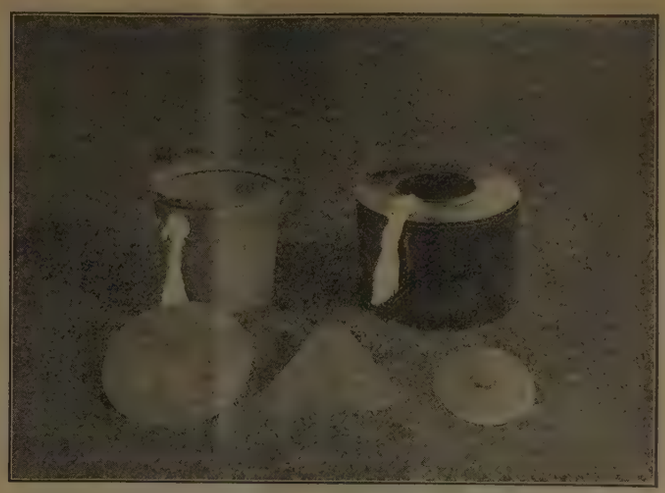
Balhannah.

At the recent Fifth Annual Show **Mr. A. G. Cameron, M.H.R., advocated further investigation into the uses of fruit for drinks.**

In the fruit section, Mr. W. Johnson was the most successful exhibitor, and secured the H. H. Shannon trophy awarded for highest aggregate. Other prizewinners were Messrs. R. Norsworthy, R. James and W. F. Collins.

The export Apple packing contest was won by R. Cichon for the third year in succession, thus gaining the Elmsdale Trophy, presented by Mr. H. N. Wicks. In the Apple packing competition, K. Sandow was first and F. Duncan second. A competition for juniors (a new innovation) was won by G. Grivell from B. Grivell.

Other sections were open for flowers, cookery, vegetables, dried fruits and preserves and needlework.



Crude oil orchard heaters as used in Tasmania for frost prevention.

Dried Fruits News

DRIED FRUITS SURPLUS.

Winemakers Apprehensive.

REPRESENTATIVES of the Wine Makers' Association, Dried Fruits Association, and the Grape Growers' Council recently met in Adelaide to discuss problems arising on the need for disposing of the large surplus of dried fruit without embarrassing the wine industry and without causing undue hardship on growers.

Winemakers are apprehensive regarding the absorption of the abnormally large surplus of dried fruits for distillation purposes, and the use of the spirit for fortifying sweet wines. It is pointed out that a surplus of 5,000 tons of dried fruit converted into spirit would mean that approximately 20,000 tons of fresh fruit would not be required next year. Apart from the severe blow that this would be to Grape growers, spirit made from such fruit is not as satisfactory as that from fresh Grapes.

Winemakers are seeking the assistance of the Federal Government in an effort to have the surplus dried fruit converted into power alcohol for industrial purposes. They do not desire to increase the hardships of the grower, but the production of wine Grapes is more than sufficient to keep all available markets for wine and spirit fully supplied.

The 1938 vintage established a record, it being estimated that 20,953,000 gallons of wine were produced in Australia, compared with 20,163,873 gallons in 1936-37.

Repeated recommendations have been made to State Governments urging that further plantings of dried fruit vines be discouraged until the economic position of the industry improves and new markets are found.

SOUTH AUSTRALIAN DRIED FRUITS BOARD.

A meeting of South Australian Dried Fruits Board was held on April 24, 1939, when all the members and the Secretary were present.

Several recommendations of the Consultative Committee in regard to regulations governing grade standards were dealt with.

In regard to the fruit produced in the Mypolonga Irrigation Area and transported to other districts for packing and processing, it was recommended that the Mypolonga Co-operative Society Ltd. call a meeting of its shareholders to consider the position.

A request from the Adelaide Chamber of Commerce for the Board to become a member was declined.

The position of dealers in relation to the quotas for the season 1938 was considered at length, and it was agreed to refer the statement to the Consultative Committee and also to communicate with the A.D.F.A. asking what steps were being taken to adjust oversales by A.D.F.A. agents and others.

A request from the Dried Fruits Publicity Committee to arrange window displays in Adelaide was complied with, and it was agreed to stage a dried fruit exhibit in connection with the forthcoming Housewives' Ideal Kitchen Competition.

TASMANIAN GRAPE INSPECTION.

Red Cliffs Agitation.

In reply to a request from the Red Cliffs Grape Growers' Association that the regulation under which imported Grapes are subject to inspection should be lifted, the Minister for Agriculture (Tas.), has stated that under the new regulation it is not necessary to lift every bunch from the box and importers have expressed their satisfaction of the method of inspection now in operation.

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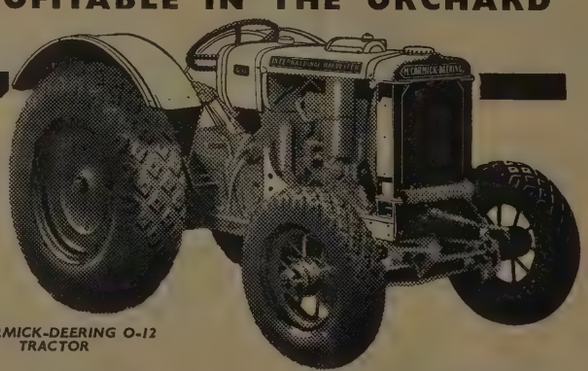

McCORMICK-DEERING O-12 TRACTOR

McCormick-Deering O-12 is the tractor specially designed to do all orchard work — ploughing, harrowing, hauling, spraying, pumping and all belt jobs. O-12 is built low and narrow to avoid overhanging branches and work close to trees. Operates economically on kerosene . . . Speeds range from 1½ to 7 miles an hour.

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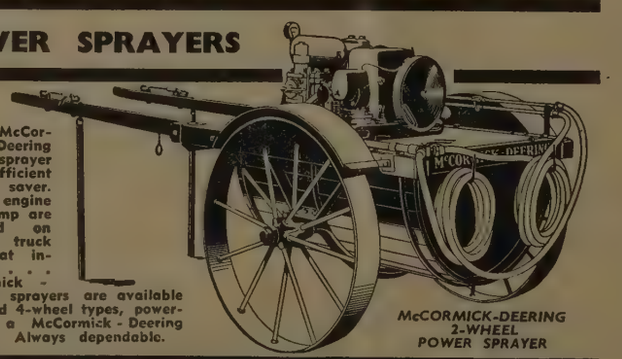

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Further, the Agricultural Department has imported varieties of Grapes from Canada which grow satisfactorily under cold conditions. These are under propagation at present and it is accordingly necessary to prevent the introduction to the State of any diseases affecting the cultivation of Grapes. It is therefore regretted that the request cannot be complied with.

PRUNES IN N.Z.

A report to hand states that the N.Z. Government has prohibited the import of dried Prunes, and has granted a monopoly of the New Zealand trade to a Wellington company. The Wellington company has announced that Prunes will only be supplied in syrup.

It is believed that Prunes will not be the only dried fruit over which the Government will eventually exert its control.

INTERNATIONAL VITICULTURAL CONFERENCE.

An International Congress of Viticulture will be held at Kreusnach, Germany, from August 21 to 30 next.

Western Australia

CRANE FOR DEEPWATER PIER.

Since the new A.C. current is available, it is hoped that the authorities will move for the installation of a modern crane on the Deepwater Pier (Albany), before the opening of the next fruit season.

The present port handicap is a cause for concern, and shipping interests are emphatic as to the need of such.

PUBLICITY IN W.A.

From reports to hand, it would appear that the Western Australian Publicity has been a great success.

Several associations donated fruit for distribution to schools, and members of the Committee attended and delivered lectures on Apples and health to various schools.

A float which took part in the Labour Day march excited much comment. There has been a great deal of press publicity generally, and Apple Week was very successful.

Members are to be congratulated on their enthusiasm and hard work, and the results achieved.

A NEW GRASS FOR SWAMPY LANDS.

Phalaris Arundinacea or Reed Canary Grass.

Entirely Distinct from Phalaris Tuberosa.

Phalaris Arundinacea, or Reed Canary Grass is a perennial, growing 3 to 8 feet tall, with leafy stems, tending to grow in dense tussocks or bunches 2 to 3 feet in diameter, and spreading underground by short, creeping branches or rootstocks. The leaves are broad, smooth, and light green in color.

This grass does best where the climate is moist and cool, but it is not sensitive to heat or cold, as it grows successfully where Winter temperature drops below zero, and where Summer temperatures occasionally are over 100.

Phalaris Arundinacea, or Reed Canary Grass makes its best growth on fertile, moist or swampy soils, is especially suited to swampy or overflowed lands of a sandy, mucky or peaty nature, and makes excellent growth on loams and clays of good fertility. The grass is not suited to saltmarsh or alkali soils. Moving overflow of water is not detrimental to this grass, during either the dormant or the growing season, in fact, Winter overflow is beneficial, because there is practically always increased growth following an overflow season.

Although naturally a moist or wet land grass, it makes excellent growth on high, productive soil if supplied with ample moisture for Spring and early Summer growth. During the recent drought, plants of Phalaris Arundinacea or Reed Canary Grass remained green at Werribee better than many other grasses.

The seed can be sown during both Autumn and Spring. On burned over land Autumn seeding is best. Any cultural operations that will stir the surface and form a partial seed bed are of great help in obtaining a good stand. Under ordinary conditions the seeds takes from 24 to 40 days for complete germination. After broadcasting the seed at the rate of 6 to 8 lbs. per acre, lightly cover with a brush harrow.

Reed Canary Grass is excellent pasture grass, its long life, long grazing season, and the large quantity of very succulent, palatable forage produced make it a valuable grass. It will carry 4 cows per acre for seven months of the year. For the best pasture it should not be allowed to make excessive growth or get old or tough. It is one of the earliest grasses to begin growth in the Spring, and reasonably close grazing improves the quality of the pasture. It should be cut for hay when approximately 25 per cent. of the early heads are in the blooming stage. It is nearly always stooked and allowed to remain until well cured. It will produce as high as 7 tons of hay per acre, or alternatively, will make excellent silage. Seed of Phalaris Arundinacea is available from Law Somner Pty. Ltd., 21 Elizabeth-street, Melbourne, C.1.

Queensland

MARKETING OF PINEAPPLES.

Queensland Pineapple growers are warned against forwarding green fruit to Sydney and Melbourne now, as the fruit takes some time to color in the south at this time of the year. By paying attention to this growers would be helping themselves and the market generally.

QUALITY FRUIT REQUIRED.

The suggestion that the C.O.D. was attempting to discipline growers in reporting on faulty fruit and packing was deplored by Mr. B. Flewell Smith (manager) recently. The C.O.D. marketed Queensland fruit, and through handling such large quantities were able to gauge exactly the requirements of the trade, and advise growers accordingly—even if the facts were sometimes unpalatable.

EMPIRE FRUITS COUNCIL.

Important Conference in London.

A conference convened by the Empire Fruits Council will meet in London commencing on June 20. Conference sessions and visits to Research Stations will occupy ten days. Matters for discussion affecting the Australian industry include the implementing of the Anglo-U.S.A. Trade Treaty and educational publicity in U.K. to increase Apple and Pear consumption.

THE MARKET GROWER

OFFICIAL ORGAN OF VEGETABLE GROWERS' SOCIETY OF VICTORIA, THE KOONDROOK & BARHAM TOMATO GROWERS ASSOCIATION AND THE SOUTH AUSTRALIAN FRUITGROWERS' AND MARKET GARDENERS' ASSOCIATION.

Vegetable Culture

MARKETING HOURS DISCUSSED — GROWERS' CLAIMS FOR FIRST CONSIDERATION — PLANTING OF POTATOES AND ONIONS.

By Our Correspondent.

ONCE AGAIN the question of market trading hours for wholesale business at the Queen Victora Market is in the limelight, and a proposal has been put forward by the storemen and packers who are employed at the market that business should start at eight o'clock each morning.

In looking at this question from all angles, it must be realised that the **first consideration in this question must be the hours that are most convenient to the growers,** who are the people who make the market, for no matter how elaborate your market buildings may be, or how modern the hours worked by those who handle the produce, these conditions will not make a market if there is no produce to buy and sell.

In all discussions it must be understood that if growers vote for earlier hours of market trading than those at present proposed, it is not because they are any more anxious to be working through the night than the storemen and packers, but, from many years of experience, they find that a reasonably early start of selling is necessary to obtain the best returns for the produce which they have for sale. It is also to be remembered that most of this produce, be it vegetables or fruit, has taken growers from six to twelve months to bring to maturity.

If it is fruit it certainly means twelve months, for there is only one crop each year, and during the months in between harvesting there must be much money spent on spraying, manuring and labour. Thus, by the time this product is landed at the market, all this fruit has a very definite value, and the grower has a very definite right not to be cramped in the hours which are at his disposal to sell his product to the best advantage.

This principle also applies to the vegetable grower, who in all weathers, and under all conditions, drought or flood, must keep on trying to produce his goods from the soil.

This is in no way like a manufacturing business, which has machinery to turn out the product, and if the finished article is not right there is something in the machine that can be quickly adjusted.

When we produce from the soil, we are working right back to nature, and must endeavour to bring crops to maturity, often under the most adverse conditions, and the expenditure of much money and time in tending them from the day they are planted until the day they are removed from the soil and taken to the market for sale. We hope that we shall receive a remunerative price, but do not know what that amount will be until we have it in our pocket.

Thus it would appear from this review of conditions of growth that the grower who brings the produce to the market must be the man who decides the hours of sale, and not people who buy these goods, hold them for a few hours between the time of purchase and resale, and during that period of time make the profit which enables them to carry on their business.

Of course we realise also that motor power has now made transport much easier and quicker, and there is no need for growers to hold fast to the same exceptionally early hours which were necessary some years ago, but it is up to growers to see that they have hours of trading which suit them. The Vegetable Growers' Association will watch this question very closely.

Potato Planting

for early new Potatoes which will mature late in October or early in November should be carried out any time after the shortest day, say, from June 20 to June 30.

Potatoes planted at this time are a shy bearing crop and take special attention in growing. However, they have the advantage of being the first new Potatoes on the market and often return very good prices.

Care must be taken to plant in land which will not get too wet and cold during the wet, cold months of their growth; an easterly aspect with a slight fall is the ideal position, and also this crop must be well protected from strong or cold winds.

Carmen No. 1 is the variety best suited to this early crop, and it is advisable to plant the whole seed, not a cut set, for if the set is cut, that part of the Potato which has been freshly cut often rots away before the set sends out a shoot.

It is a great advantage to this crop to have the sets shot in shallow trays, and plant gently without breaking the shoot. If the land is in good order and contains plenty of humus, a dressing of superphosphate at the rate of five cwt. to the acre will be sufficient when planting. As soon as the plant appears above the ground a dressing of ammonia at the rate of three cwt. to the acre, or blood manure at the rate of six cwt. to the acre also gives good results.

Brown Globe

Onion Plants

should now be transplanted from the seed beds out into the open lands.

These Onions will mature in the middle of November. Care in planting this crop must be taken that the root does not come in contact with manure while freshly planted, for if too much nitrogen is close to the root it often allows a grub to germinate, which gets into the bulb of the plant and so prevents the plant from making a root.

Fresh stable manure should never be used in planting this crop; if stable manure is used at all it should only be a very light dressing. The crop responds well to a light dressing of superphosphate raked into the land before the planting is done, and, as soon as the new leaves begin to show on the plant, a dressing of blood and bone manure at the rate of five to ten cwts. to the acre, according to the condition the land was in when the crop was planted.

Work the land well between the rows and loosen as often as possible—not less than once every three weeks—until the stage when the plant starts to make a bulb. Working should then cease, and stray weeds be pulled out if necessary.

Other than Potatoes or Onions June is not a good month to plant, but it is very necessary to keep stirring the land in amongst the crops which have been previously planted. This does not apply to Cauliflowers, which do not respond to any working after they are half grown.

THE CABBAGE BUTTERFLY.

(Pieris rapae L.)

By R. T. M. Pescott, M.Agr.Sc., F.R.E.S., Entomologist, in "Victorian Journal of Agriculture."

TOWARDS the end of March of this year two specimens of the Cabbage Butterfly (Pieris rapae L.)—were captured flying around flowers in the grounds of the University of Melbourne and at Canterbury. This is the first occasion on which this pest of Cabbages and Cauliflowers has been recorded in Victoria, and almost certainly in Australia. The following account of this pest and its habits should enable vegetable growers to more easily recognise it if it becomes established. Growers are asked to immediately communicate with the Department of Agriculture if they suspect that this insect is present on their property.

Plants Attacked.

The Cabbage Butterfly caterpillars attack all vegetables of the Cabbage family—Cabbages and Cauliflowers particularly, and, to a lesser extent, after they are placed out in the Turnip, Kale, Radish, Mustard and Horse Radish. Flowering plants such as Stocks, and weeds such as Charlock and Shepherd's Purse are also attacked.

Nature of Injury.

The caterpillars of this pest commence work at the beginning of the season, damaging early plants. After riddling the outer leaves, they attack the tender inner leaves as they form, frequently feeding within the immature heads and rendering the Cabbage unfit for food because of the abundance of dark-green excreta which they form. In cool weather the caterpillars often feed freely exposed on the surface of the leaves in the sunshine. Frequently they work into the centre of the Cabbage, attacking the undeveloped "heart" and rendering the head worthless for market. Seedling Cabbages grown in cold frames are often damaged shortly after they are placed out in the field, the caterpillars cutting into the "bud," and thus destroying the future head. Injury of this nature may be serious, many plants being a complete loss.

Description and Life History.

Butterfly: The butterfly is white, marked with black near the tops of the forewings, and has a wing spread of up to 2 inches. The female (see Fig. Ia) has two conspicuous spots on each forewing, whereas the male (see Fig. 1b) has one only. The underside of the hindwing is of a uniform straw-yellow color of satiny appearance, and in both sexes there is usually an indistinct black spot near its tip. The body of the female is whitish; that of the male is usually darker on the back. The male is smaller than the female.

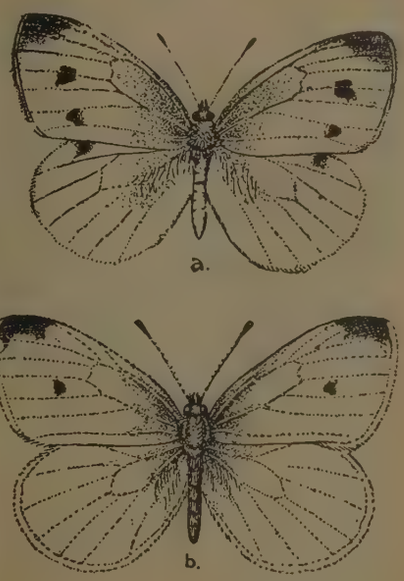

Fig. 1.—The Cabbage Butterfly.
(a) Female. (b) Male.
(Illus. courtesy Victorian "Journal of Agriculture.")

Eggs: The eggs are spindle shaped, pale-yellow in color, strongly ribbed, and are laid singly, usually on the underside of the outer leaves of Cabbage and other plants.

Caterpillar: The caterpillar is velvety-green in color and very similar to the color of the plant on which it is feeding. There is a faint yellow stripe down the middle of the back, and a row of yellow spots along each side in line with the breathing pores. The surface of the body is somewhat rough and finely dotted with small black spots. It measures, when fully grown, about 1¼ inches in length.

Chrysalis: When the caterpillar becomes fully grown, it attaches itself to a Cabbage leaf or other nearby object by means of a thread-like girdle of silk and then turns to the chrysalis, which measures about ¾ inch long, varying in color from dirty-grey to yellow, green, or dark-grey. The butterflies commonly fly to garden

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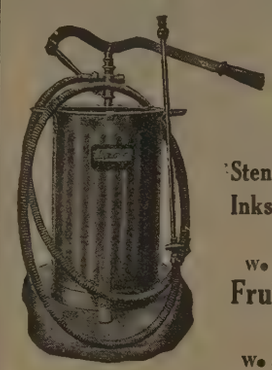
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flowers sucking up nectar, or they may be seen hovering over the flowers. The butterfly is active by day, being on the wing from early morning until near dusk. It is a comparatively slow but tireless flier, being capable of journeying long distances.

Control.

According to American authorities this Cabbage Caterpillar is not difficult of control if proper remedies are used as soon as damage is detected and before the grubs become too abundant. **The most satisfactory method appears to lie in the application of arsenical dusts or sprays as are commonly used for the control of the Cabbage Moth caterpillar.**

Reference.—Chittenden, F. A. — "The Common Cabbage Worm and Its Control." U.S.D.A. Farmers' Bulletin 1461, 1926.

PRODUCTION OF EARLY BEANS.

Points for Success.

THE FOLLOWING PRINCIPLES were established as a result of the Bean growing competition conducted during the past three years in the Wyong-Gosford district by the Tumbi Umbi Branch of the Agricultural Bureau:—

1. A variety such as Tweed Wonder is the most suitable.
2. Liberal dressings of fertiliser are essential.
3. Efficient weed control is necessary.
4. Cultivations, particularly during the later stages of growth, should be confined to lightly stirring the soil to control weeds and maintain a surface mulch.
5. Properly constructed drains or furrows are essential.
6. The aspect is most important. The crop should be protected from prevailing winds and have access to the sun for as long as possible during the day.
7. Only the best quality seed should be used. The sowing of seed of unknown origin is a risky undertaking.

Fig. 2—An immature Cabbage head, showing injury by grubs feeding within. (Illus. courtesy Vic. "Journal of Agriculture.")

N.S.W. VEGETABLE INDUSTRY.

THE ANNUAL CONFERENCE of the Vegetable Growers' Association of N.S.W. was held in Sydney in mid-May. In opening the conference, the Director of State Marketing, Mr. A. A. Watson, emphasised the need for the expansion of canning of vegetables.

He stated that whereas last year returns from this trade in N.S.W. amounted to £127,000, as against £128,000 in 1937, in Canada in 1936 the trade was valued at £2,785,000, as against 1937, when it had risen to £3,400,000. Local growers could not hope to compete with the already well-established oversea trade, but there were possibilities in the East and the South Sea Islands, as well as in Australia.

Discussing the activities of forestallers, conference decided that in many ways they were more of an asset than a pest, and at the best made only a few shillings profit.

Conference supported the recommendations of the Royal Commission that the employment of canvassers by agents, or the payments of money by them as a consideration for influencing consignments should be prohibited.

Conference also agreed that, while they were in no way dissatisfied with council ownership and control of the markets within the city, an advisory committee representative of the interests functioning in the markets should be appointed to work in conjunction with the City Council in a consultative capacity.

Market Opening Hours.

Considerable discussion centred about the hour at which the markets should be opened to buyers, and the findings of the Commissioner that a uniform opening hour of 7 a.m. should be fixed for all markets was criticised by grower-delegates, who considered that any opening later than 6 a.m. would seriously hamper trading facilities.

CHINESE BOYCOTT JAPANESE ONIONS.

Strong resentment was expressed recently by several Chinese merchants, who stated that the Chinese were unanimous in their refusal to handle several hundred tons of Japanese Onions due in N.Z. in July. Although the quantity is unknown, it is stated that a fairly large quantity will be required in view of a local shortage.

APPLE WEEK IN MELBOURNE.

June 19-24.

PLANS ARE IN HAND by the Victorian Section of the Apple and Pear Publicity Committee for a big event for the week commencing June 19. City shops will be decorated with handsome baskets of Apples and Pears; several windows will be completely devoted to fruit displays. The Railways Department and Caterers' Association are heartily co-operating, so are the Housewives' Association, also the Gas Co. and Electricity Commission. Demonstrations of Apple cooking will be given and there will be a series of broadcasts by dentists and prominent citizens.

Apple Week will be officially opened by Senator McLeay, Minister for Commerce, in a broadcast over 3LO on Monday, June 19, at 12 noon.

CAVE'S PURE FRUIT DRINKS.

Owing to largely increased trade, Messrs. Cave's Pure Fruit Drinks have been transferred to 15-19 Chetwynd-street, W. Melbourne.

Jones: "Were you surprised when you got the nomination?"

Brown: "I'll say. My acceptance speech nearly fell out of my hand."

VICTORIAN NEWS AND NOTES

Orchardists' and Fruit Cool Stores Association of Victoria

21st Annual Conference

THE twenty-first annual conference of the Orchardists' and Fruit Cool Stores Association of Victoria was held at Dromana on May 25, 1939. Mr. F. Petty presided over a large attendance of delegates from the principal fruitgrowing centres of the State.

There were also in attendance Messrs. J. V. Fairbairn, M.H.R., W. H. Everard, M.L.A., C. P. Gartside, M.L.C., F. M. Read, M.Ag.Sc. (Acting Superintendent of Horticulture), and E. N. Robinson (Commonwealth Fruit Co-ordinating Officer).

A cordial welcome was tendered by Cr. E. Rudduck, President of the Shire of Flinders.

In officially opening the conference, the Hon. J. V. Fairbairn, Minister for Aviation, **recommended greater cohesion among growers so that the industry could speak with one voice.**

Annual Report.

The annual report referred to the passing of the **Apple and Pear Organisation Act**, which dealt with export, and had certain powers affecting the home markets. Regarding **publicity**, the Association was convinced that valuable publicity had been secured; the programme included Apple Week and co-operation with Health Week authorities, distribution of Apples to schools, kindergartens, etc. The Apple and Pear Publicity and Research Act had also been passed under which funds would be collected from growers for continuing publicity work.

Other matters dealt with in the report included agreement with the Storemen and Packers' Union, Black Spot research, **endorsement of the proposal for the sale of large fruits by count instead of by weight**, water supply for Harcourt, retention of Ottawa agreement and excess water charge in the Metropolitan Area.

Apple and Pear Publicity.

The Chairman presented a detailed report on Apple and Pear publicity by the Victorian Committee, stating that this was one of the most important matters before the industry.

Mr. Mair said **publicity was needed for Pears**, particularly in educating the public as to the best time for eating the fruit. The complaints from the public that the Pears were woody was because the fruit needed to be kept for about a week before being eaten.

Mr. K. Weeding congratulated the Publicity Committee on its splendid efforts. There was room for greater consumption of Apples and Pears in Australia. **He considered that the work of educating the children to be exceedingly important.** Mr. Weeding then gave particulars of the extensive fruit publicity campaigns in U.S.A.

Mr. F. Beet stated that in distributing Apples to schools, helpful addresses were given to scholars, and this information was effectively reaching the homes.

At the request of the Chairman, Mr. R. E. Boardman presented details of the Apple and Pear publicity programme, including Apple Weeks, distribution of Apples to schools, handwriting competition, and the utilising of the information from the medical and dental professions in the form of press articles, radio talks, pamphlets, etc.

At the instance of Mr. J. J. Tully a cordial vote of thanks was carried to the Publicity Committee.

Road Transport.

Mr. W. P. Hutchinson directed attention to the need for watchfulness in relation to retention of road transport services.

A resolution was carried:—

"That the question of road transport be left to the Executive to watch carefully and take appropriate action when the time arises."

At luncheon, Mr. F. Petty proposed the Loyal toast, and other toasts were honored. "Federal and State Parliaments," proposed by Mr. W. P. Mair and responded to by Messrs. J. V. Fairbairn, M.H.R., C. P. Gartside, M.L.C., and W. H. Everard, M.L.A.; "The Visitors," proposed by Mr. J. H. Lang and responded to by Mr. Rudduck and Mr. F. M. Read, M.Ag.Sc., Acting Superintendent of Horticulture; "The Chairman," proposed by Mr. L. G. Cole, and responded to by Mr. F. Petty.

Marketing Hours.

Mr. W. P. Mair said that the proposals for shortening of the hours of sale in the Victoria Market appeared to be detrimental to growers, and moved: **"That this Association resists any endeavour to alter the present trading hours in the Victoria Market."** Mr. L. Haebech (Peninsula Fruitgrowers' Central Association) spoke in support.

Mr. E. Noonan favored later opening of the market as a progressive move.

Mr. G. T. Knee said the present marketing hours were typical of the "dark ages." He favored the opening at 6 a.m. daily.

Messrs. L. Cole, Jarman, J. Woodward and J. H. Tainton supported the motion, stating that the early buyers were the best, and thus fruit was enabled to be sent to all parts of the State. Further, later opening market hours would increase the present severe congestion.

Mr. Mair's motion was carried.

N.S.W. Fruit Enquiry.

Mr. H. J. Noonan drew attention to the report of the Royal Commissioner on the fruit industry in N.S.W.

The summary published in the "Fruit World" and the Association's reply were dealt with, including the Commissioner's recommendations as follows:—

1. To compel retailers to indicate to consumers that cold storage fruit offered for sale is ex-cool stores.

2. To prohibit the sale of cold storage pome fruit (except Democrat Apples) after the end of October.

3. To permit the importation of Canadian Apples during November and December.

4. To prescribe marketing periods for various classes and varieties of fruit.

Continuing, Mr. Noonan stated that labelling of the fruit as "cool stored" would be detrimental to the industry, bearing in mind public prejudice and ignorance of the true facts. Actually some varieties were improved by cold storage. The idea of the Commissioner endeavouring to prevent the sale of over-stored fruit was to be commended, but the Association differed with the Commissioner in the way of bringing about the desired result.

2. It was difficult to understand the recommendation that the sale of cold stored pome fruits with the exception of Democrat Apples should cease at the end of October, as there were quite a number of Apples and Pears which retained their marketable qualities after that date.

3. Setting aside the question of the danger of introduction of Fire Blight, unless there were prospects of reciprocal trade in Apples and Pears with Canada, the Commissioner's recommendation was viewed unfavorably.

4. The recommendation for prescribing a marketing period for various classes and varieties of fruit appeared to be on the right lines.

In the discussion it was stated that the Secretary's reply as published in the "Fruit World" generally met the position.

Mr. F. M. Read, Acting Superintendent of Horticulture, said that he felt it would be difficult for the N.S.W. Enquiry Commission to maintain some of the recommendations so far made public.

With regard to the recommendation that pome fruits other than Democrat Apples be not marketed in N.S.W. after October, Mr. Read stated that where varieties were offered for sale late in the season and were deemed to be unsatisfactory, such varieties would undoubtedly be replaced by more suitable ones.

The development of gas storage had revealed the possibilities for lengthening the commercial life of varieties. Jonathans were now being kept till December. Continued experiments were being made in this direction. He could not imagine why it should be suggested that the sale of Granny Smith should be restricted as had been suggested.

It was decided, on the motion of Mr. G. F. Fankhauser, that this matter be referred to the Executive.

Mr. Hutchinson Congratulated.

The Chairman congratulated Mr W. P. Hutchinson on his appointment to the Apple and Pear Board. (Applause.) In responding, Mr. Hutchinson said his best services would be used to assist the industry.

Labor Questions.

Mr. Noonan gave particulars of the negotiations with the Storemen and Packers' Union leading up to the joint request to the Department of Labor for the establishment of **a separate Wages Board for the fruit packing industry.**

During the discussion it was stated that efforts were being made in certain quarters for deleting Section 9 of the Shops and Factories Act—which Section exempted primary industries (including fruitgrowing) from the operation of the Act.

Mr. G. H. Sprague moved, Mr. E. Noonan seconded: **"That this Association oppose the deletion of Section 9 from the Shops and Factories Act and make every effort to secure its retention."** Carried.

Mr. J. H. Lang presented details of the case, at present proceeding, whereby the Australian Workers' Union was seeking increased wages for orchard employees.

The report was adopted.

Hours of Fruit Shops.

Mr. W. P. Mair stated that the metropolitan fruit shops were now closed on Saturday afternoons from May to September. He considered this very detrimental to the industry, and moved: **"That this Association urges the re-opening of fruit shops on Saturday afternoons for the sale of fruit."**

Mr. G. H. Knee, in seconding, said the only way to secure the reopening of the fruit shops was to organise a counter petition against the petition on which the shops were closed.

Mr. W. H. Everard, M.L.A., stated that any assistance he could render would be available, as in the past.

Pruning demonstration in a Victorian orchard.

Messrs. McRostie and growers wrote pointing out that the closing of shops on Saturday afternoons was detrimental to the fruit and vegetable industries.

The motion was carried.

Fruit Packing Instructors.

The Minister for Agriculture, Mr. Hogan, wrote stating that owing to shortage of funds it was no longer possible to engage the two additional packing instructors, whose services had been made possible because of the Commonwealth Grant.

Mr. Cole spoke of the great value accruing from the training of school children in packing in fruit growing areas. He viewed the reduction of these services very seriously, and moved: **"That this Association take the necessary steps to approach the Minister for Agriculture and the Premier with a view to obtaining sufficient funds for restarting the packing classes.**

Mr. T. E. Butler, in seconding, recommended that the new Apple and Pear Board be approached suggesting the registration of certificated packers.

Mr. Weeding stated that fruit packing in U.S.A. was dealt with by trained teams of packers moving from place to place to handle the crops. While this was not possible in Australia at this stage, **he suggested there was a trend for more shed packing as against orchard packing.**

The motion was carried.

It was decided to vote £10 from the publicity fund for prizes at the Royal Show.

Black Spot Experiments.

Mr. E. Noonan, President, Southern Victoria Fruitgrowers' Association, reported on the experiments on Black Spot on Pears carried out for a number of years. Useful information had been obtained despite the negative results of last year owing to seasonal conditions. Various people and organisations subscribed to the funds for which this Association was grateful, but he felt that **the urgent need was for the establishment of an experimental orchard in the southern districts.**

The report was received. It was decided to request the Apple and Pear Board to consider the establishment of a research fund.

Election of Office-Bearers.

Office-bearers were elected as follows:—

President: F. Petty.

Immediate Past-President: L. G. Cole.

Vice-Presidents: W. P. Mair (Tyabb), and J. H. Lang (Harcourt).

Executive Members: C. Wallace and D. Lechte, Private Store.

Representative to Chamber of Agriculture and Employers' Federation: F. Petty.

Representative to Standards Association: H. E. P. Moore.

Secretary: Mr. Cole nominated Mr. H. J. Noonan to continue his position as Secretary.

Mr. Noonan stated he had to decline nomination. Apart from the extent of the work now involved, he found himself completely out of harmony with the Executive relative to Apple and Pear Board negotiations and matters arising therefrom. His enthusiasm for the Association had now waned.

Mr. Cole moved, Mr. Mair seconded, that a vote of appreciation for Mr. Noonan's services be inserted in the minutes. They stated that his services had been of unique value.

Mr. J. J. Tully felt that the Association was suffering a great loss in Mr. Noonan's retirement. He supported the vote of appreciation.

Mr. A. E. Stamford also spoke in appreciation of Mr. Noonan's work. The news of his retirement came as a "bombshell." The resolution was carried.

Mr. W. A. Stewart was elected Secretary.

Display of Pictures.

In the evening Mr. K. Weeding displayed an entertaining series of pictures, revealing the activities in U.S.A. and Canadian orchards, also charming scenic views. The pictures (taken by Mr. L. Petty) were also shown of Apple distributions to Victorian school children and Field Days at Mr. F. Beet's orchard. Mr. Weeding was cordially thanked.

Victorian Fruit Crops

Orange Crops Lighter than Last Season, Lemons Good

HORTICULTURAL conditions in Victoria during May are reviewed in the following report issued by the Department of Agriculture.

Although it is too early as yet to form accurate estimates of the

Deciduous Fruit Crops

for next season, observations made during the past month are most reassuring. Good bud development has been reported from the majority of districts, and **there is every prospect that, given a normal Spring and Summer, the trees will carry normal crops next season.**

Cover Crops.

In most districts the soil is in wonderful heart, being neither too wet nor too dry, and carrying a remarkably good cover of natural herbage. In fact, it is many years since conditions have been so favorable for the growth of both natural and sown cover crops.

In the Goulburn Valley Irrigation Areas many of the orchards are still wet, particularly where there has been no proper provision for drainage. The position in the Horsham district, which continued to be acute long after the drought had broken in the remainder of the State, was relieved during May by good rains. Nevertheless heavy falls are still needed in the catchment areas to ensure ample irrigation water for next season.

Crop Reports.

The **Apple** harvest was completed during May and from Gippsland excellent samples of **Yates** have been forwarded. Portland growers have had a much better season than some other districts, although the crop was only 60 per cent. of normal. Nevertheless the fruit was of good quality.

From Mildura and Swan Hill good crops of **Lemons** are reported; the Lemon crops are generally very good considering the adverse conditions which prevailed during the Summer. The Winter crop in the Doncaster district, however, is medium, but there is a good setting of the Summer crop.

In the Swan Hill district the **Navel** crop has ripened earlier than usual, and a good proportion of it, especially the **Thompson's** variety, has been forwarded to the markets. The crop is light to very light.

It is expected that about 10,000 citrus trees will be planted out in the Swan Hill district this year, particularly in the Murrabit area.

In the Mildura district the crops of **Washington Navels** and **Valencias** will be lighter than last season. Good crops of good quality **Grapefruit** are being harvested.

In the Wangaratta district, failure to cultivate early in the season, especially on the shallower soils, resulted in the death of some trees, and a number will require cutting back to start the trees afresh, but, generally, citrus in this area is in a wonderful condition. The Grapefruit crops in the North-East have been a failure.

The **Sultana** crop at Swan Hill has not averaged more than 66 per cent. of last year's yield. Added to this loss has been the extra expense of drying, and few growers escaped having to use a dehydrating plant. The position in regard to Sultanas at Mildura is similar to that at Swan Hill, approximately 30 per cent. of the fruit gathered after the rain being treated by dehydrating plants. Because of the extra handling of the dried fruit crop, seasonal routine work such as sowing cover crops has been neglected in many cases.

Passionfruit vines have recovered well in the Gippsland and North-Eastern districts, but the quality of the Gippsland fruit will not be as good as usual.

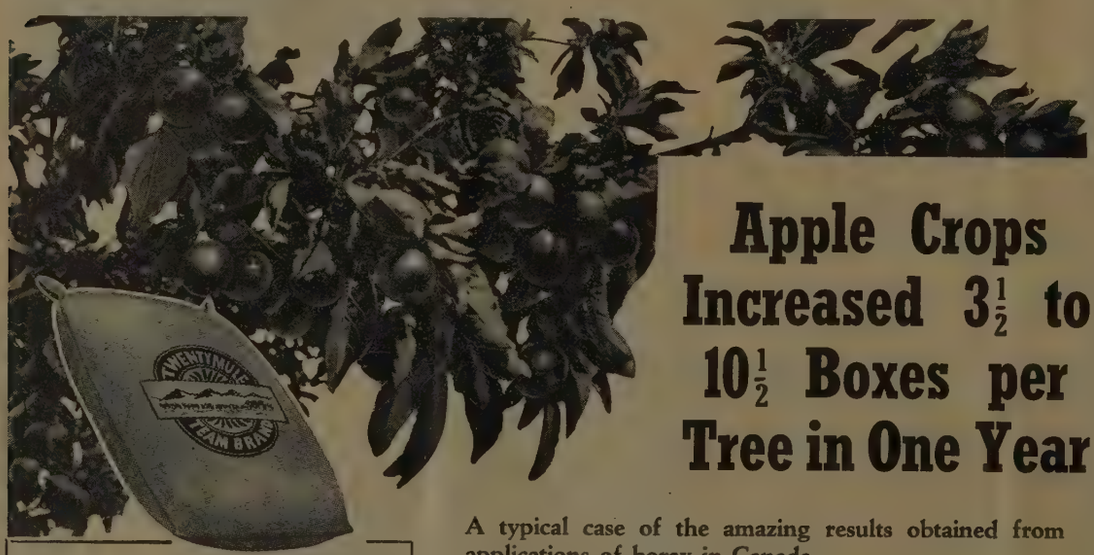
Sultanas, processed since the rains, have produced a very plain grade, but the **Currant, Waltham** and **Muscatel** standards have been maintained very satisfactorily. A final irrigation has recently been available, and cover crops are making fair growth. However, owing to the cost of seed, and other reasons, less cover cropping than usual has been undertaken this season.

In the non-irrigated viticultural areas, satisfactory green crops have occurred naturally, and pruning is in progress.

VICTORIAN DEPARTMENT OF AGRICULTURE APPRECIATED.

In the annual report of the Orchardists' and Fruit Cool Stores Association of Victoria, the following is stated:—

"Appreciation is expressed to the Department of Agriculture for the instructional circulars issued from time to time. It is felt that **the information contained in these circulars is of definite value to the industry."**



Apple Crops Increased 3½ to 10½ Boxes per Tree in One Year

A typical case of the amazing results obtained from applications of borax in Canada.

Drought Spot – Internal Cork – Corky Pit – Corky Core – Crinkle and other diseases – caused by the lack of boron – can be prevented by broadcasting ½ lb. borax on the soil around the trees.

QUOTATIONS AND TECHNICAL INFORMATION OBTAINABLE FROM AGENTS:—

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H. M. Russell & Co. Pty. Ltd., Eagle and Charlotte Streets, Brisbane, Q'land.

W. H. MacLennan Pty. Ltd., 499 Little Collins Street, Melbourne, C.1.

Swift & Co. Pty. Ltd., 26 Clarence Street, Sydney; also at Melbourne, Perth, Adelaide, Brisbane, and Wellington (N.Z.).

Borax Consolidated Ltd.

Regis House, King William Street, London, E.C.4

The Argentine Pear Industry

1938 Crop Amounted to 2,700,000 Bushels - Huge Annual Increase Forecast

EXPORTS INCREASE FROM 14,000 BUSHELS IN 1931 TO 565,000 BUSHELS IN 1937.

"PROSPECTIVE PRODUCTION IN 1942 IN THE RIO NEGRO VALLEY ALONE, DISREGARDING NEW PLANTINGS SINCE 1935, IS EQUIVALENT TO AN ADDITIONAL 3,500,000 FOR EXPORT, COMPARED WITH TOTAL ARGENTINE EXPORTS OF 565,000 BOXES IN 1937."

PEAR-GROWING IN THE ARGENTINE has expanded greatly of late years, but recent poor prices have discouraged new plantings. Further increases are expected as young trees come into full bearing. As production already exceeds domestic needs, the future of the industry depends upon the export market.

In an article in "The Blue Anchor," published by the California Fruit Exchange and written by Paul O. Nyhus, of the American Agricultural Attache, the Pear industry in Argentine is reviewed.

The Argentine Pear growing industry is located mainly in the Rio Negro Valley and in the Province of Mendoza. In both districts the fruit is grown under irrigation.

The total 1938 crop is estimated at approximately 2,700,000 boxes of about 44 pounds each, net weight. It is believed that in another 10 years as new trees come into full bearing the crop will be several times that figure.

With the development of badly needed precooling and refrigeration facilities, Argentina could rank in a few years among the world's

Most Important Exporters

of fresh Pears by shipping to markets in the Northern Hemisphere during the Winter months of the year. Indicative of the rapidity with which new plantings have taken place during the past few years is the fact that the number of trees now under cultivation is placed at 3,300,000, compared with 2,600,000 in 1932.

Most of the Pears grown in Argentina at the present time are of the Williams (Bartlett) variety. Because of relatively higher prices of certain other varieties, however, Argentine fruit growers in recent years have been shifting from Williams to those varieties.

Export of Argentine Pears.

Argentine Pear exports have increased rapidly, for production has expanded more rapidly than domestic consumption. **Exports in 1937 amounted to 565,000 boxes, compared with only 14,000 boxes in 1931.** The United Kingdom, Brazil, France, the United States, and Sweden take the bulk of the exports.

Argentine exporters enjoy a seasonal advantage in the sale of Pears in foreign markets. Exports take place largely during the months of January, February and March (this fact, together with the increase in export, is illustrated by the table in column three on this page), when supplies in most Northern Hemisphere countries are at low levels. The Pears are graded into "extra fancy" and "fancy," and exports are permitted only on the basis of certificates issued by the Ministry of Agriculture.

Shipping are refrigeration facilities are being provided, and special attention is being devoted to obtaining concessions with respect to tariffs, quotas, and exchange regulations in trade agreements with foreign countries.

Principal Fruitgrowing Districts.

There are three fruitgrowing regions of commercial importance in Argentina: (1) Rio Negro Valley where Pears do well and are free from Pear Blight, but, because of relatively better prices for Apples, more Apple than Pear trees have been set out. Pear and Apple trees are the main fruit trees grown—figures being: Pear trees, 1,684,000; Apples, 756,000; other fruits, 171,000. The rapidity with which the commercial production of Pears in this district has developed is indicated by the fact that in 1938 over 74 per cent. of all freight loadings of Pears in Argentina were made there, compared with only about 46 per cent. in 1932.

(2) **Mendoza Area:** Approximately 902,000 acres are under irrigation in the Mendoza region, and practically all the land capable of being irrigated with the present dams and irrigation facilities is cultivated. Pear trees represent about 33 per cent. of the total fruit trees in Mendoza. While the trend in production in Mendoza is upward, a steadily declining proportion of the total Argentine crop is being supplied by that region.

(3) **Delta District:** The quality of the fruit from this district is poor. Most of the fruit consists of Peaches, Quinces, and Plums, and the production of Pears is relatively insignificant.

Production and Trade.

No official data are available on the actual number of new Pear trees planted in Argentine during the past 5 or 6 years.

It is known, however, that new plantings have been extensive, especially in the Rio Negro Valley.

The census taken by the Government in 1932 indicated a total of 2,631,000 Pear trees for the entire country. Unofficial estimates place the total number at the present time at 3,300,000.

It is generally believed that the period of rapid expansion in most of the Rio Negro Valley region is past. The number of trees at the present time is placed at 1,800,000.

Foreign Trade and Domestic Consumption.

Sharp increases in exports of Pears have been associated with the rapid expansion in production.

Domestic consumption has more than doubled since 1934 and in 1937 absorbed 1,479,000 boxes of the total production of 2,029,000 boxes.

Trade sources are of the opinion that the increase in domestic consumption in the immediate future will be small and **that further expansion in production will require larger outlets abroad.**

Prospective production in 1942 in the Rio Negro Valley alone, disregarding new plantings since 1935, is equivalent to an additional 3,500,000 boxes for export, compared with total Argentine exports of 565,000 boxes in 1937.

Grading, Packing, and Precooling Facilities.

The Argentine Ministry of Agriculture has set up official standards for "extra fancy" and "fancy" Pears. Officials of the Ministry of Agriculture inspect the packing and grading of fruit at the packing sheds. Inspectors also examine shipments for condition and grade just prior to exportation abroad and, on the basis of this examination, issue or deny export permits. **Only one grower has a small refrigeration space for precooling Pears. With this minor exception, there are no facilities for the precooling or refrigeration of shipments of Pears en route to Buenos Aires.**

The railway company serving the Mendoza Grape district has refrigerator cars for the movement of table Grapes shipped abroad; but the railway company serving the Rio Negro Valley **does not operate refrigerator cars,** and Pear shipments make the 26-hour haul from the packing plants to the port of Buenos Aires in freight cars having only special ventilation.

Upon arrival in Buenos Aires, the fruit is immediately put into cold storage to await shipment abroad or local consumption. The railway officials maintain that Argentine Pears arrive in good condition in European markets under present methods of handling, and that precooling and refrigeration shipment would involve additional freight charges and correspondingly lower prices to growers.

Exports of Pears from Argentina, by Months, 1931-1937*.

Month.	1931. Boxes.	1937. Boxes.
January	1,175	110,186
February	4,872	293,233
March	1,392	70,602
April	3,610	40,847
May	1,175	18,618
June	1,262	10,614
July	131	1,000
August	—	783
September	87	87
October	43	217
November	43	—
December	43	43
Total	13,833	546,230

*Converted from metric tons on the basis of 43.5 boxes to the ton.

Surplus Production and Declining Prices.

Prices for Williams Pears have fallen off sharply since commercial production on a substantial scale was attained.

The expansion and returns from the Pear industry in Argentina have been checked by these low prices and prospective lower prices for Williams Pears.

It is contended that at the present prices for Williams Pears many growers cannot operate without a loss but that Williams do so well in the Rio Negro and Mendoza regions that good growers can operate at a small profit.

Offsetting to some extent the low prices for Williams are the good returns in general from Apples and from some of the late maturing varieties of Pears.

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NATIONAL INSURANCE.

It has been announced that the scheme for National Insurance has merely been curtailed for the present, but that in the future the matter will again be brought forward.

Owing to various causes, delay is inevitable, but it is proposed that a family medical benefit be provided. There has been much criticism in the light of our very heavy defence commitments, and it is therefore desirable that there should be a review of the finances of any suggested scheme of national insurance. A review of the whole plan will take place, the existing knowledge and work being used in the process.

It is proposed that Parliament will set up a Committee of Members of Parliament, with whom will be associated representatives of the medical profession, and of the approved societies, together with the National Insurance Commission itself to examine the subject and to see whether a practicable scheme in which all parties will cheerfully co-operate can be evolved. The proceedings of the Committee would not be lengthy, as a report would be desired within a limited period.

CANADIAN NEWS LETTER.

Fruit Trees on the Wheat Prairies.

WINNIPEG.. The so-called treeless prairies of Canada which were once only considered suitable for growing wheat and other cereals, will one day become an important factor in the fruit-growing industry of Canada, states the Dept. of Trade and Commerce, Ottawa.

While fruit-tree growing is still in a more or less experimental stage or a hobby among a few farmers, already 1,650 fruit trees have been planted since 1927, of which 1,400 have survived and many of them are now bearing, having produced 6,600 pounds of fruit in 1938. Small trial orchards have been started in 14 different experimental stations in the prairie provinces, even as far north as Wanless in latitude 54. These are mainly small Apples and Plums, including Plum-cherry hybrids. Many of the trees are, however, still too young to come into bearing stage.

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Faith in Australia

International Harvester Company's new works at Corio Bay. In the foreground is their factory with the City of Geelong in the background.

During May representatives of the business community attended the opening of Harvester House, the new headquarters of the International Harvester Company of Australia Pty. Ltd., at City-road, South Melbourne, by the Hon. A. A. Dunstan, M.L.A., Premier of Victoria.

The floor space of the premises covers nearly 4½ acres, and the whole ground floor frontage of 426 feet to City-road is fitted with wide, plate-glass windows fronting the show-rooms, which are the largest and most modernly equipped motor truck and farm implement display rooms in the Southern Hemisphere. The whole of the upper floor along the City-road front is occupied by the general office for Australia and the office of the Victorian branch. It also contains a picture theatre for demonstration purposes.

The mechanical departments include a modern assembly plant and service station for International motor trucks, and storage and assembly space for McCormick-Deering tractors and agricultural machines and implements as well as a spare parts section for all the equipment handled by the company.

Great Factory at Geelong.

Coincident with the opening of Harvester House, the company celebrated the commencement of work at its great new factory at Geelong, where the big cupola furnaces, foundry, forge and machine shops are now working at full blast turning out from Australian iron the company's extensive line of McCormick-Deering agricultural machines and implements for farmers in every part of the Commonwealth. The factory, 46 acres in area, has a frontage to a deep water channel of Corio Bay, where wharves are being built to provide direct ocean-going shipping facilities. Road and railway connections pass right into the heart of the factory, providing direct transport to near and distant cities and farming areas.

Comfort for employees is a salient feature of the factory equipment, shower baths, luncheon rooms, sanitary conveniences, ventilation and temperature control being incorporated.

The Premier, Mr. Dunstan, in opening Harvester House, spoke of the comprehensive scope of the company's undertaking and said that the capital of £2,000,000 used in the business was a convincing and heartening guarantee of faith in Australia's present stability and future development.

Aerial view of International Harvester's agricultural implement works. Works in foreground fronting Corio Quay, where a new wharf is being built to accommodate the Company's shipping. This view illustrates the ideal position of the plant and its proximity to the growing industrial and maritime city of Geelong. The factory is equally well served by road and railway. (C. D. Pratt Airview, Essendon.)

Planting of Deciduous Fruit Trees

Early planting of deciduous fruit trees, say June and early July—is advocated, because the roots commence growing long before there is any move in the tops, and it is an advantage for the trees to be in their permanent positions when this first root action takes place, states the N.S.W. Agricultural Bulletin.

Where the land has been ploughed and subsoiled some time previously it will probably now only need working up with harrows and cultivators, though in some cases a cross-ploughing may be first advisable. In all cases endeavour to finish with a deep-stirring implement that will bring the clods to the top and allow the fine soil to remain underneath.

A fine surface has its advantages in laying out, and for this reason the land may be rolled just prior to the operation, but it should be remembered that though the roots should come in contact with fine soil, **a surface of small clods is a more lasting mulch than one of very fine soil.** A cloddy surface also allows the rain to enter the soil more freely than a fine one.

The advantage of ploughing and of subsoiling where necessary some months prior to planting is that the soil has a chance of absorbing and retaining any rain that falls, and generally it will be in moist enough condition for the trees to be planted in the early part of the Winter.

NEWS FROM TASMANIA

NEW COOL STORE COMPLETED — ALL STORAGE SPACE FILLED — DIFFICULTY IN OBTAINING SKILLED WORKERS — SHIPPING PROGRAMME INADEQUATE — COMPLAINTS OF BAD CARRIAGE — RISING COSTS OF PRODUCTION — RUSSET TOLERANCE — INCREASE OF BROWN ROT — APPLE CANNING IN PROGRESS IN THE TAMAR — LATE DELIVERY OF FRUIT AT SYDNEY AND BRISBANE CAUSES ANNOYANCE — MEETING BETWEEN SHIPPING COMPANIES AND STATE FRUIT BOARD — RESULTS OF STATE FRUIT BOARD ELECTIONS.

By Our Correspondent.

HOBART, 22/5/39.

PICKING IS ALMOST FINISHED, even in the later districts, and the final oversea shipments are being packed and should be away before this issue is in the hands of readers.

Large quantities of the later varieties are being put in the various cool stores—in fact, most stores are booked right up.

Messrs. Jones & Co. have jsut completed a fine

New Cool Store

close to the wharf, and some of the chambers are **specially designed for the precooling of Pears.**

I understand this increased capacity has also been fully applied for, which is an indication of the expansion of the fruit industry in Tasmania.

Growers are utilising the brief period between finishing picking and starting pruning in a general clean up of orchards and sheds.

The weather throughout the Autumn in Southern Tasmania remained fine, with the temperature above normal and the rainfall barely half the usual.

The difficulty of obtaining skilled assistance, especially packers, is becoming more acute each year, as the young people prefer city life. The Departmental packing classes help in this direction and, I understand, are being continued this season.

The Shipping Programme

appears to have been inadequate, as large quantities of fruit have been left over from various boats, causing continuous congestion on the wharves.

It is understood about 250,000 cases will be shipped during the next week.

There have been some complaints of **bad carriage** already, the "Largs Bay" having apparently frozen some of her fruit which was condemned by the health authorities. Presumably the consignees will watch the matter and put in claims if advisable.

The

Costs of Preparing

the fruit for market are steadily mounting up, the increasing use of pine cases, with the added cost of wiring, the super crown pack, which requires cardboard collars to prevent the top layer coming out of the case and the unitised lid all add to the cost of getting it up, to say nothing of the extra time taken in packing and stacking. I notice an American journal sounds a warning note on this aspect of the business. If these costs are passed on to the consumer it will reduce the turnover, and if they are not it comes out of the grower's pocket. We should try and hit the happy medium.

In spite of the extra care taken to still further improve the pack, the prices overseas don't appear to be quite so good as last year. Is it that we reached the optimum last year and are now getting a little beyond it?

When the

Toleration for Russeting

in the regulations was cut down and interpretation became more severe, I pointed out that the damage caused by Late Spot would be more prevalent than before. The Autumn was wet and warm, and last season an unusual number of consignments were rejected by the inspectors because of Late Spot.

The **Brown Rot** (Lenticel disease) has been more troublesome than usual since the dewy nights set in with warm day temperatures, and many lines of Sturmers have been rejected from this cause.

I think the fact is that the growers are inclined to put the second Bordeaux spray on a little too soon, or substitute lime sulphur for fear of russeting the fruit. This impairs the effect of the fungicide, but reduces the russeting and favors the incidence of disease if weather conditions are at all favorable to fungus growths. It appears that the Victorian Pear growers are faced with the same problem. It seems we have the choice of two evils—namely a bit of russeting or an increase in fungous disease.

The evaporators and canning works are now operating, but owing to the dry season peeling sizes are not too plentiful.

The Tamar Co. (Mr. Laurie Taylor, manager) has started canning Apples in the north, and the prospects of establishing the trade there appear quite good.

Delivery of Cargoes.

Considerable annoyance and loss have recently been caused to growers by the late delivery of fruit cargoes in Sydney and Brisbane, and a deputation from the State Fruit Board waited on the managers of Huddart Parker and the Union Co. to discuss the matter.

It was decided to stop receiving cargo a day earlier so as to give time to complete the loading and documents by the advertised time of sailing, and avoid working overtime.

The

State Fruit Board Election

took place on May 15 by ballot, and resulted in the return of Messrs. D. E. Ryan and C. O. Smith for the Southern Division, and Mr. Bulman (unopposed) for the North. The primary votes were C. O. Smith 675, D. E. Ryan 578, E. Norris 365, M. Calvert 357. When C. O. Smith's surplus and Mr. Calvert's were cut up and distributed, Mr. Ryan was elected to the second seat.

Mr. Ryan was elected Chairman of the Board for the ensuing 12 months.

Export and Interstate Marketing :: Shortage of Seasoned Cases :: Fruit Packing Classes :: Pruning Apricot Trees.

IN THE MAY REPORT from the Tasmanian Department of Agriculture, the following is stated:—

Up to May 15, 2,316,030 cases of Apples, and 195,037 cases of Pears had been shipped overseas, and 678,598 cases of Apples and Pears to interstate markets.

Owing to the unexpectedly large proportion of exportable fruit, case timber became scarce, and cases constructed of unseasoned wood gave trouble on the export wharves.

School packing classes are in full swing.

Stone Fruits.

The pruning of stone fruits has commenced. The removal of Apricot limbs affected by "Die Back" is recommended now, whilst these may still be easily seen. **Cut all limbs back if possible into healthy white wood, even a pin point of diseased tissue in the wood may perpetuate the trouble and still more of the tree will suffer during the following season.** Treat all cut surfaces with the **mercuric-glycerine mixture**—details of this may be obtained on application to the Department of Agriculture.

TRADE WITH THE EAST.

Tasmanian Prospects Bright.

Members of the State Fruit Board are of the opinion that there are bright prospects for increasing trade with the East. At a recent meeting it was stated that New South Wales supplied 85 per cent. of the market requirements of the East, and in Singapore there was a general impression that the main centre in Australia for Apples was N.S.W. Mr. J. R. Abel stated that Tasmanian Apples were being forwarded from the mainland with N.S.W. labels, and it was necessary to stop the practice. A motion, moved by Mr. J. S. Bulman, that consideration should be given to the appointment of an officer to supervise the extension of the fruit trade to the Eastern markets was agreed to.

Some gulls were following a steamer, and an Irishman said to his companion.

"Sure, an' they're a nice flock of pigeons."

"They're not pigeons," said his companion. "They're gulls."

"Well," said the Irishman, "gulls or boys, they're a nice flock of pigeons."

Winter pruning in an orchard at Rosstrevor, Tasmania.

TASMANIAN STATE FRUIT BOARD.

AT the May meeting of the Tasmanian State Fruit Board there were present Messrs. D. E. Ryan, C. O. Smith, W. H. Calvert, M.L.C., L. S. Taylor, T. Burnaby, J. S. Bulman, J. R. Abel, T G. Thompson, R. H. Thompson and the Secretary, Mr. A. J. Honey.

There were two candidates for the chairmanship—Messrs. D. E. Ryan and C. O. Smith. Mr. Ryan was re-elected by 5 votes to 4. The Chairman's allowance was fixed at £50.

Mr. J. R. Abel was elected Vice-Chairman.

Canadian Apples.

A resolution was passed to the effect that the Minister for Agriculture should be requested to use his influence with Federal Members to oppose the recommendation of the N.S.W. Commission to the effect that Canadian Apples should be admitted to Australia, and that only Democrats should be sold after October, as the Board took a very serious view of the matter.

Interstate Marketing.

It was also resolved that the Minister for Agriculture be asked to request the Agricultural Department to issue inspection certificates when necessary, on fruit shipped to interstate markets.

A request was made to the Government to allow Mr. H. McKay (Tasmanian Government representative in Sydney), to visit Tasmania to discuss with the Board at its next meeting the whole question of the disposal of Tasmanian fruit in Sydney.

It was decided to meet f.o.b. buyers at the next meeting to discuss with them the matter of inspection of fruit sold f.o.b.

Trade With The East.

Mr. Bulman urged the need for further extending the Indian and Eastern markets. After a full discussion on various aspects of the trade it was decided, on the motion of Messrs. Bulman and Smith, "That consideration be given at the next meeting of the Board to the appointment of an officer to supervise the extension of the fruit trade to Eastern markets."

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Export & Commercial News

Fruitgrowing in Canada

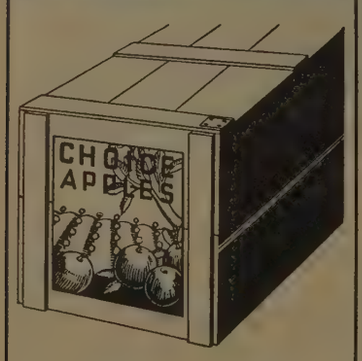
CERTAIN sections of Canada, by reason of favorable soil and climatic conditions, are particularly well suited to fruit growing. The Annapolis Valley of Nova Scotia, the Niagara Peninsula in Ontario and the Okanagan Valley of British Columbia are world-famous centres of production. Experimental shipments of Nova Scotia Apples were first made in 1861, but not until 20 years later did the trade develop into a successful commercial venture. Up to 1890, the annual production of Apples in Nova Scotia rarely exceeded 100,000 barrels, but after date there was a pronounced increase in acreage and in production, which later reached 1,000,000 barrels in 1909 and 1,900,000 barrels in 1911. The all-time high record for production was established by the crop of 1933, which reached the total of 2,438,000 barrels. The great bulk of the Nova Scotia crop is exported to Britain, states the official handbook for 1939, issued by the Department of Trade and Commerce, Ottawa, Canada.

In Ontario, where the commercial production of all varieties of fruits has reached its highest development, Apples have been grown from the middle of the 18th century, but commercial orcharding has developed only during the past 60 or 70 years, following the improvement in transportation facilities. In addition to Apples, practically all other temperate zone fruits are grown in Ontario, but the Strawberry, Peach, and Grape are the most important from the revenue-producing standpoint. Some Ontario fruit is exported to British and Continental European ports, but most of it is marketed in the province and in other parts of Canada.

In British Columbia, commercial fruit growing is of comparatively recent origin, growth in production having been particularly rapid since 1910. The high point was reached in 1937 with a crop of 5,798,300 boxes of Apples. Other tree fruits, such as Pears, Plums and Prunes, Cherries, Peaches and Apricots are all grown in commercial quantities, while all the berry crops are grown extensively in the province. The Prairie Provinces and Eastern Canada absorb a large part of the production, while considerable quantities of Apples are exported to British and foreign markets.

In New Brunswick and Quebec, fruit growing is increasing, and fairly important. Apples and Strawberries are the principal crops.

In 1937, the total value of commercial fruit production in Canada was 17,481,200 dollars, including: — Apples, 10,645,000 dollars; Pears, 538,900 dollars; Plums and Prunes, 278,100 dollars; Peaches, 960,400 dollars; Cherries, 533,700 dollars; Strawberries, 2,226,100 dollars; Raspberries, 959,600 dollars; Loganberries, 119,300 dollars; and Grapes, 1,085,900 dollars. Conditions during 1938 were favorable for the development of fruit crops and, except for Grapes and Strawberries, all fruits showed substantially larger production than during 1937.



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APPLES CONDEMNED AT COLOMBO.

"Infested with Caterpillar Borers."

The manager of Lawford's Fruit Exchange (Mr. E. I. Lawford), reported to the V.F.M.A. recently he had been advised that a quantity of 100 cases of Granny Smith Apples sent to Colombo had been condemned by the customs agents on the ground that they were infested with caterpillar borers, although the fruit had been passed under strict Govt. supervision in Victoria.

The reason given, said Mr. Lawford, was very vague. A more specific description of the disease was wanted in order to protect shippers sending fruit to that market. There were many kinds of caterpillar borers.

The Australian Apple and Pear Council has been notified and the matter is being brought under the notice of the Dept. of Commerce.

LONDON'S SHIPPING.

Over 1,000,000 N.R.T.

During the week ended April 21, 904 vessels, representing 1,066,062 net register tons, used the Port of London. Of these, 500 vessels (870,400 net register tons) were to and from Empire and foreign ports, and 404 vessels (195,662 net register tons) were engaged in coastwise traffic.

S.A. PEARS IN LONDON.

Agent-General Says Argentine Pears Are Superior.

Barter Agreement Between Argentine and Germany Also Causing Alarm.

THAT THE BARTER AGREEMENT between Germany and the Argentine is causing concern in U.S.A. and Great Britain is stated in the recent report by Sir Chas. McCann, the South Australian Agent-General in London.

The report also refers to the low prices ruling for cattle in the U.K., despite the efforts to revive the value of home-grown beef. The Agent-General criticises the dressing of Australian and N.Z. chilled beef.

Australian Pear Exports.
Inspection of Pears.
Argentine of Higher Quality.

On the subject of Australian Pears on the London market, Sir Chas. McCann writes: "The Chief Horticultural Instructor in South Australia (Mr. Strickland) arrived too late to see Australian Williams Pears, but a few cases were kept in cold storage, also some of the same variety from Argentine, in order to give him an opportunity of seeing a similar variety of Pear grown in two different countries. The test proved that the Williams from Argentine is a much more attractive fruit. The skin is clearer and cleaner, and has a rich, oily gloss, and, what is more remarkable, the Argentine production retains its condition of soundness much longer than the Australian Pear.

"The S.A. Williams this season arrived sound, and c.i.f. buyers are well satisfied with the condition and with the trading profit made, but are very surprised that **despite samples being sent out and strictest advice given, Australian packers still persist in not adopting the standard Pear pad.** C.I.F. buyers, in consequence, have received the top layers of nearly every case with a very high percentage of bruised and chafed fruit, which would have been avoided if the standard Californian pad had been used."

LONDON RETURNS.

Australian and N.Z. Apples and Pears.

Cabled advices regarding fruit prices in London are as follows:—

Victorian: Ex "Coptic," "Mooltan," "Dorset," "New Zealand Star," "Moreton Bay." **Pears:** Packhams, 11/- to 14/6; Boscs, 7/9 to 11/-; Coles, 8/6 to 10/-; Nelis, 9/-. **Apples:** Jonathans, 9/9 to 10/6; Granny Smiths, 11/- to 13/6; Ribstons, 9/- to 10/3; Cleo., 10/- to 10/9; and Dunns, 9/9 to 10/-.

Tasmanian: Pears: Comice, 7/- to 12/6; Bosc, 7/- to 11/6; Coles, 8/- to 9/9; Packhams, 7/9 to 10/-.

New South Wales: Comice, 10/3 to 10/9; Boscs, 7/3 to 8/-.

Tasmanian: Cox's, 8/6 to 14/9; Alf., 8/9 to 12/-; Jons.. 8/6 to 10/9; Granny, 11/9 to 14/-; Sturmers, 9/6 to 10/6; Cleo.. 9/- to 11/6; Dunns, 9/9 to 10/6; Ribstons, 5/9 to 10/6.

S. Aust.: Cleo., 10/3 to 11/-; Londons, 9/9 to 10/-; Jons., 9/6 to 10/3; Romes, 9/- to 11/-.

W. Aust.: Jons., 10/6 to 11/-; Cleo., 10/9.

New Zealand: Dunns, 9/9 to 11/3; Worcesters, 8/9 to 10/-; Cox's, 11/3 to 14/6.

FINNISH TRADE DELEGATION VISIT THE PORT OF LONDON.

The Finnish Trade Delegation made an extensive tour of the Port of London recently. The visitors included Sir Henrik Ramsay, K.B.E., Ph.D., Chairman of the Delegation, M. Rolf, B. Berner, and M. Ake Kihlman, Vice-Chairman of the Delegation, and other prominent Finnish business men. Sir Norman Vernon, Bart., Chairman of the Anglo-Finnish Section of the London Chamber of Commerce, and Lady Vernon, together with other members of the Chamber, accompanied the Delegation.

The Delegation was received at the Head Offices of the Port of London Authority by the Rt. Hon. Lord Ritchie, of Dundee, Chairman.

The party, accompanied by the Rt. Hon. Thomas Wiles, P.C., Vice-Chairman of the Port of London Authority, Capt. Sir Ion Hamilton Benn, Bart., C.B., D.S.O., T.D., Admiral Sir Alan Hotham, K.C.M.G., C.B., and Mr A. MacLean, Members of the Authority, made an inspection of various warehouses and vaults, the King George V. and Royal Albert Docks, and the Millenium Mills in the Royal Victoria Dock.

SOUTH AUSTRALIAN FRUIT EXPORTS.

Adelaide, May 16, 1939.

The Secretary of the South Australian Fruit Marketing Association, Mr. E. Whitfield Mills, states that up to the middle of May 222,436 cases of Apples had been exported to U.K.

Although 19,141 cases of Pears had been ear-marked for the United Kingdom, only 15,084 cases were dispatched overseas, both to the United Kingdom and Continental markets.

In addition to the Apple shipments to U.K., 47,116 cases were shipped to the Continent and approximately 9,183 cases to the Dutch East Indies and Colombo, thus bringing the total Apple export figures for this season's crop up to 278,835 cases.

Teacher (giving Scripture lesson): "There was a rib taken out of Adam, and there was made—what, Tommy Jones?"

Tommy (nervously): "Oh!—er—a hash, I s'pose, sir!"

Producers' Co-operative Distributing Society Ltd.

Are now paying a Bonus of 15% on all Commissions charged to regular clients of the Fruit & Vegetable Section for year ending Sept., 1938

Send Your Consignments TO US

MELBOURNE & SYDNEY.

W.A. FRUIT EXPORTS.

Record Shipments.

The Chief State Supervising Officer (Mr. G. W. Wickens) stated recently that the total shipment of Apples and Pears from Western Australia from January 1 to April 30, 1939, amounted to 892,684 boxes of Apples and 65,665 boxes of Pears. Of these, 558,815 boxes of Apples were sent to the United Kingdom, 290,376 to the Continent of Europe, and 43,493 to other destinations. Of Pears, 48,485 boxes were sent to U.K., 15,951 to the Continent, and 1,229 to other destinations.

The export of Apples has already exceeded the total quantity shipped in any previous year excepting in the year ended June 30, 1936, the total quantity for that year being 909,308 boxes. Last year the total quantity of Apples shipped for the 12 months ended June 30, 1938, only amounted to 538,703 boxes.

"The quantity of Pears shipped this season is a record for the State," stated Mr. Wickens, "the previous largest quantity having been exported in the year ended June 30, 1933, when 46,986 boxes were shipped. Last year, only 27,417 boxes were forwarded to overseas markets."

WESTERN AUSTRALIAN APPLES.

Special Displays in London.

Because of the large consignments of Apples and Pears from Western Australia this season, it was determined that an advertising display on a somewhat larger scale than usual should be attempted.

The firm of T. Walton Ltd. kindly co-operated and dressed a window facing the Strand and also two show windows facing Savoy-street. In addition to the windows a very attractive exhibit inside the reception room was arranged. Apples and Pears were sold to the public from the stands comprising the exhibit. All the fruit displayed was sold as picked fruit.

In the windows the fruit was arranged in large gilt baskets, and the appearance and general arrangement was considerably enhanced by the skilful use of Autumn foliage and bright red ribbon. Inside the reception room the fruit was displayed in baskets and in pyramids on very low counters. Each Apple rested in a fancy, green-colored paper cup, which accentuated the natural attractiveness of the fruit.

When completed the display attracted considerable attention and much favorable comment was passed concerning its appearance and advertising value.

WESTERN AUSTRALIA.

Export to Eastern States.

Consignments of fruit to the Eastern States from W.A. during the past ten years have been practically negligible, but this year has seen a resumption of the trade; about 20,000 cases of Apples per month are going to Sydney.

The net returns for shipments were viewed as only fair, but gross selling prices are understood to have been substantially in advance of general market parity in Sydney, while enthusiastic praise has been bestowed in trade circles on the quality of the fruit.

However, owing to the incidence of the Navigation Act, and other factors, costs of shipping, etc., are so heavy that buoyant returns are essential to recoup growers and shippers. The cost of landing a case of Apples in the Sydney market from the port of Albany is almost equivalent to the freight to the London and Hamburg markets.

TASMANIA

PACKING NEEDS IMPROVEMENT.

Stricter Measures Urged.

ADVICE received from Mr. S. H. Grueber (State Supervisor of Exports), stated that his examinations of the early shipments of Tasmanian fruit disclosed that in many consignments the quality, condition, pack, and sizing were unsatisfactory, although a special effort had been made to ensure that only good fruit properly graded and packed was sent abroad. **He recommended that the inspection be tightened up, especally in regard to packing.**

Mr. Grueber also mentioned that a large number of the dump cases were arriving very slack and created an unfavourable impression on the market.

It is therefore obvious that the views of some growers as reflected in the packing of their fruit did not coincide with those of the oversea trade, and that strict inspection is necessary until the required standard is maintained by all exporters.

TAMAR SEASON CLOSES.

The fruit export season in northern Tasmania closed with the departure of the "Australia Star" from Beauty Pt. with a cargo of 31,948 cases of Apples and 8,940½ cases of Pears.

The quantity shipped overseas from the Tamar this year was 425,983 cases, comprising 351,173 cases of Apples and 74,810 cases of Pears. The total was about 16,000 cases below 1938 shipments.

TASMANIAN APPLES IN SYDNEY.

Over-Inspection Stated to Cause Deterioration.

In a recent statement, Mr. P. S. MacDermott (Secretary, N.S.W. Chamber of Fruit and Vegetable Industries) said that he considered over-thoroughness on the part of fruit inspectors was the cause of the deterioration in quality of Tasmanian Apples and Pears.

It took two days for six inspectors to go through a Tasmanian shipment, and the fruit was not as fresh as it should be when it reached retailers. He said that only a portion of a shipment should be inspected, and a general idea of the quality gained from that.

TASMANIAN APPLES IN SYDNEY.

D Grade Apples Must be Correctly Marked.

The Minister for Agriculture (Mr. R. Cosgrove) stated recently that the N.S.W. Department of Agriculture had pointed out that a number of consignments of "domestic trade" fruit were being forwarded from Tasmania and that the cases were marked with the letter "D" only.

This is not in accordance with the regulations, and all consignments of fruit of this class must be marked with the full designation—**"D Grade."**

AUSTRALIAN APPLE AND PEAR BOARD.

The Minister for Commerce (Senator McLeay) announced that the personnel of the Australian Apple and Pear Board would be:—

Growers' Representatives.

Tasmania: Messrs. T. Burnaby, W. H. F. Calvert, D. E. Ryan and L. S. Taylor.

Victoria: Messrs. W. Young and W. P. Hutchinson.

Western Australia: Messrs. W. P. Scott and H. W. Soothill.

New South Wales: Mr. A. U. Tonking, M.L.A.

Queensland: Mr. B. Flewell Smith.

South Australia: Mr. M. J. Vickers.

Exporters' Representatives.

Victoria: Mr. J. B. Mills.

South Australia: Mr. P. R. B. Searcy.

Western Australia: Mr. R. M. Carter.

Tasmania: Mr. R. W. Humphreys.

The Board will meet early in June to make arrangements for the marketing overseas of the 1940 Apple and Pear Crop, and to make arrangements for the 1939 publicity campaign.

APPLE AND PEAR PUBLICITY.

Growers are Appreciative.

Appreciation for valuable Apple and Pear publicity is expressed in the annual report of the Victorian Cool Stores Association. This report states that the principal features of the publicity programme were "Apple Week" displays, Health Week distribution to schools, and distributions prior to Health Week carried out by a special committee to schools and kindergartens.

"It is felt by the Committee that definite progress is being made and a full programme of publicity has been planned for the present season.

TRADE WITH CEYLON.

Why Are Australian Apples Being Condemned?

Messrs. Lawfords' Fruit Exchange, Doncaster, Victoria, have brought to the notice of the Australian Apple and Pear Council the condemnation of two Australian shipments of Apples—one of 100 cases of Granny Smiths and one of 100 cases of Rokewoods — at Colombo, on the grounds of being infested with "Caterpillar Borers." These shippers feel that they are entitled to a more specific description of the disease for which the landing of these Apples was refused, so that shippers may know against what they have to guard in shipping to Colombo.

The matter has been taken up with the Commerce Department, who advise that both Victorian and South Australian consignments have been condemned—448 cases in all. Specimens of the moths bred from larvae collected in the infested fruit are being forwarded to our Department, and are being examined and identified. In the meantime, the Commonwealth Officer, Mr. Carne, is making investigations regarding these shipments.

The Ceylon officials consider that the Borers are Codling Moths, and stress the importance of keeping the pests out of their country, also the damage that is likely to be caused to our trade with Ceylon.

This is rather an important matter, affecting trade between Australia and Ceylon, and is worthy of thorough investigation.

APPLES AND PEAR EXPORTS— 1939.

THE FOLLOWING FIGURES from the Commerce Department reveal the exports of Australian Apples and Pears to the United Kingdom and the Continent this season up to April 30.

State.	United Kingdom.		Contient.		Total.
	Apples.	Pears.	Apples.	Pears.	
Queensland	17,026	—	—	—	17,026
New South Wales	7,910	9,127	72	—	17,109
Tasmania	1,605,124	226,356	379,401	—	2,210,881
Victoria	166,410	248,246	9,154	—	425,810
South Australia	204,508	19,141	53,720	—	277,369
West Australia	558,715	48,482	290,383	15,951	913,531
	2,559,693	551,352	732,730	15,951	3,859,726

In addition, 87,175 cases of Apples and 14,917 cases of Pears were exported to other destinations. The total exports of Apples to April 30, 1939, are 3,380,138, as compared with 3,656,377 to the same date last year. Pears exported to April 30, 1939 are 582,220 cases, as compared with 524,562 cases to the same date last season.

Gerrard Sales and Service
GERRARD
"Made in Australia" is a welcome note in any good Australian's buying. Gerrard machines, wire-seal strapping and packing requisites are Australian-made.
GERRARD The Tie That Binds
GERRARD WIRE TYING MACHINES CO. PTY. LTD.
Melbourne, Sydney, Brisbane, Townsville, Perth, Adelaide, Hobart

ORGANISED MARKETING.

Fruit Commissioner Quotes Great Britain, and Praises Banana Board.

IN THE COURSE of his comprehensive survey of the fruit industry in New South Wales, the Royal Commissioner, Mr. J. E. McCulloch, LL.B., quoted authoritative opinions from Great Britain, which has now organised its agricultural industry on very intensive lines.

In his findings, the Commissioner also warmly commended the work done for growers by the Banana Marketing Board.

Among the experts cited was Mr. A. W. Street, C.B., C.M.G., C.I.E., M.C., who, speaking at a Conference convened by the Ministry of Agriculture at Emanuel College, Cambridge, in June, 1935, said:—

No one supposed that Marketing Boards, national in scope and carrying out regulatory and trading functions, could hope to avoid difficulties . . .

"Every political party now agrees that the principle of Marketing Acts in some form or other, is part of a permanent policy.

It is no longer conceivable that marketing will revert to the old-time higgling and that anyone can make money out of farming after the product leaves the farmer's hands.

The Marketing Acts are the equipment for a great experiment in the possibility of farmers organising their industry themselves, with due regard to the interests of the consumers. If it fails, not less, but more control will be inevitable.

"Law of Supply and Demand."

"Is the idea that man can control in some measure his economic destiny sound? One answer is expressed in its crudest form by the man who says, with an air of having at his command all the wisdom of the ancients—'you can't interfere with the law of supply and demand' as though that were the end and not the beginning of the matter.

"This attitude of mind is on a par with a belief in Central African witchcraft. It is not based on knowledge, but on superstition.

"Laws, whether they are economic laws, natural laws, or even human laws, are there to be used, not worshipped in blind superstition or turned into an excuse for mental gymnastics.

Watt and the Steam Engine.

"Suppose James Watt, when he saw the kettle boiling, instead of going and inventing the steam-engine, had said to himself—'My dear fellow, this is a very dangerous business. If I tinker with that kettle, it will blow up. You really can't interefere with the laws of nature' . . ."

Success of Banana Organisation.

It is significant that the Commissioner, dealing specifically with the operations of the N.S.W. Banana Marketing Board, described it as "the best organised section of the fresh fruit industry." He reviewed the opposition to the continuance of the Board, and stated that it would be a retrogressive step if so valuable an organisation were allowed to be scrapped.

IMPROVING SYDNEY MARKETS.

The Sydney City Council finance committee has decided to make a number of improvements at the City Markets so that more space might be available in the vegetable section, as well as improved light and air.

It was agreed that when stalls in the remodelled area were being re-allotted after the improvements had been carried out, the present tenants in that area should have preference.

OPPORTUNITY.

Capacity seldom lacks opportunity. The man who has anything in him creates opportunities for himself.

The great secret of success in life is to be ready when your opportunity comes.

Opportunities do not come with their values stamped on them; every one must be challenged.

Opportunities are like Apples; if you pick them too soon they are green, and if you wait too long they are rotten.

Opportunity is the flower of time, and as the stalk may remain when the flower is cut off, so time may remain with us when opportunity is gone.

Opportunities fly in a straight line, touch us but once, and never return; but the wrongs we do to others fly in a circle—they come back to the place from which they started.

Cable Address: DAVIS, MELBOURNE. Code: "ABC," 4th and 5th Editions. Box, G.P.O. 148B.

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Consignments solicited. One Trial Invited. Best Prices obtained. Prompt Advice and Payment.
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Telegraphic Address: "Listeria," Melbourne. Telephone: F 6341. Private: Win. 4535.

Codes: Bentley's A.B.C 5th Edition. **IMPORTANT TO GROWERS** Box 555D, Melbourne.

Australia looks to you to produce and sell good fruit, but to **PRODUCE GOOD FRUIT** and have it badly sold is a reflection on your business ability. To sell well is as important as to produce well. The greatest combination that can exist beneficially is that between a painstaking fruitgrower and a painstaking salesman.

If you have good fruit to market, you will find in the firm of **GEORGE LISTER PTY. LTD.** the service you require. Established over 50 Years.

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Prompt Returns and Sales Notes Daily.
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& COMMISSION AGENT
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CONSIGNMENTS OF FRUIT AND VEGETABLES SOLICITED.
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T. Stott & Sons *FRUIT MERCHANTS* ESTABLISHED 1889.
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COUNTRY AND INTERSTATE ORDER TRADE SUPPLIED.
SHIPPING No. 41. PROMPT SETTLEMENTS. CONSIGNMENTS SOLICITED.
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Regular Supplies of Quality Fruit well Packed and Graded will realize the Best Prices.

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Growers Will Receive Top Market Value and Prompt Returns.
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Phone: F 5035.

Marketing Fruit In Sydney

FRUITGROWERS' FEDERATION DEFINITELY URGES RETENTION OF 7 A.M. OPENING.

IT IS NOW JUST TWELVE MONTHS ago since the Sydney City Council decided to adopt the uniform opening hour of 7 o'clock for fruit and vegetable markets instead of 6 o'clock for the vegetable market and 7 o'clock for those areas selling fruit. Originally, the alteration was for a trial period of six months, which period was later extended for a further six months after protests had been lodged by a deputation representative of the industry, at the intention of the City Council to revert to an earlier opening. The matter, however, has again arisen, and it is reported that the Finance Committee of the City Council recommended that both fruit and vegetable markets should be open for business on Friday and Saturday each week at 6.30.

In view of the success that attended the 7 o'clock opening hour during the past 12 months, the Fruitgrowers' Federation has made representations to the City Council objecting to an alteration of the present position. It is believed that many of those who objected to the introduction of the later opening, particularly of the vegetable market, have become accustomed to the conditions recently in vogue, and had adapted their business to the changed conditions, and a reversion in part to the previous hours of selling is therefore likely to be rather disturbing. The Federation has always advocated that the hours of selling should be dictated by:—

a. The time at which most produce arrives at the market and is sorted and stacked ready for selling,

b. By the advantages of concentrated competition that result from buyers of all types commencing to purchase at a regular hour under the supervision of the market authorities.

It is not denied that an earlier opening would have some support from certain grower sellers and from certain owners of road transport vehicles, both groups of whom are anxious to return to the country to do other work and to prepare their load for the next day. Those buyers also, who had early access to the market to select choice lots at their own figure would also find their operations handicapped by the later opening.

It was certainly a great convenience to arrange by private treaty, quietly and without interruption, the price of certain products, whether for distribution to customers or as an act of forestalling the market, but the benefits derived by such activities were confined to the persons so operating rather than to the benefit of the public and the producer.

Concentrated competition, in which country buyers, provedores, shippers, exclusive retailers and ordinary retailers, hawkers and barrowmen, were vying with each other to secure their particular product, obviated the necessity of preferential treatment, and tended to the stabilising of values throughout the morning.

The fairness of such conditions is unquestionable, for not merely are buyers competing one with the other to secure their requirements, but vendors are also competing to maintain their prices and yet at the same time affect a clearance of their stock. In such a manner the operations of forestallers are to some extent curtailed and the unnecessary profits of speculators escaped, the public receiving the produce from the producer with as few handlings as is possible under our present system of marketing.

That the earlier opening is recommended for only Friday and Saturday of each week, and only for a trial period of three months, only reduces in slight degree the retrograde nature of the recommendation.

A trial at an earlier opening hour should not be necessary, for earlier openings have been tried in the past and were found unsuccessful, and Friday of all days of the week is an extremely busy day as far as the quantity of purchases is concerned. In addition, trains from certain districts on a Friday, particularly in the Summer time are frequently late, the heavily laden trucks from the Irrigation Area containing extremely perishable produce that if not cleared on the Friday must be offered at ruinous prices on the poor Saturday morning market to escape deterioration over the weekend.

If the Council has in mind the necessity of quicker clearing the producers market so that it might be occupied by the temporary tenants of Paddy's Market, it is maintained that failing the ability of the existing market staff to do this work, that extra labor should be employed. It is hoped that the Council in its deliberations will not under estimate the importance of the later opening of the market to the efficient clearing of produce that is valuable—not merely to the remotely situated growers of the Eastern States, but also to the consuming public of Sydney.—L. T. Pearce, Market Representative, Fruitgrowers' Federation of N.S.W.

Because of the success of the 7 a.m. opening of the Sydney Fruit and Vegetable Markets, the Fruitgrowers' Federation of N.S.W. strongly recommends a continuation of this opening hour and protests against the proposal for opening at 6.30 a.m. on Fridays and Saturdays.

ALIENS IN INDUSTRY.

Are They Receiving Preference?

From time to time the Returned Soldiers' Association has directed attention to the large number of aliens who seem to be getting control of various industries. Specific instances have been the large number of Southern Europeans in the sugar industry of Queensland, the Banana growing industry of N.S.W., and the vegetable growing industry of Victoria, as well as some of the other States.

A deputation waited on the Victorian Minister for Lands on May 25, stating that there had been a definite drift from Red Cliffs soldier and closer settlement blocks to Southern Europeans, and that some private sheds preferred foreign settlers to Australians.

The Minister, in reply, stated he would do everything possible to assist in maintaining the Australian standards and to ensure that Australian settlers were not forced off their blocks by aliens.

More Concessions Needed.

The deputation pointed out that concession improvements, including provision for arranging and drying racks were needed. The alternative was disintegration of the settlement.

The Minister promised full enquiry.

FRUIT EXPORT FROM AUSTRALIA.

Value of Dried, Canned, and Fresh Fruit Exports Exceeds £6,000,000.

The total value of fresh, dried, and preserved fruits exported from the Commonwealth for the last financial year amounted to £A6,040,514, being greater by £A328,094 than the previous year.

PAKENHAM (V.) EXPORTS.

The close of the Pakenham export season will probably see the total number of cases of Apples shipped pass the 70,000 case mark.

Although this will represent a marked reduction on the average total—in a normal year, Pakenham growers send overseas from 100,000 to 150,000 cases of fruit, it is considerably above the estimates made three or four months ago.

Although the rains at the end of February came too late for the Jonathan crops, the Yates and Rokewoods made such a remarkable recovery that in a number of orchards the quality of the fruit has never been surpassed.

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NEW SOUTH WALES NOTES—(Continued from page 12).

regarding financial relief were the subject of discussion, and it was decided to request the Government to implement the Royal Commission recommendations at the earliest possible moment. Lest the interests of financial institutions should cause undue hardship to certain settlers, such institutions were to be requested to defer action of an extreme nature until such time as the Government had been able to thoroughly investigate the position.

Opposition to any form of compulsory hail insurance was expressed and the delay in modernising Darling Harbor Goods Yard was unfavorably commented upon. Resolutions in regard to both these matters were passed by the conference.

Pruning of Apple Trees

Aspects of Framework Development

FEW orchard subjects call forth greater interest or receive more discussion than the theory and practice of pruning, states the "N.S.W. Agricultural Bulletin." For that reason, something akin to pride is taken in the work, and, in the case of Apple trees at least, often with undesired results.

Prune for Profit.

It should be borne in mind from the outset that the first consideration in pruning is profit, and that formality of type, symmetry and other aesthetic features of the subject are of minor importance only. The removal of a limb, sub-leader or other considerable portion of an aged Apple tree is not easily justified, whether it is removed on the score of being offensive to the eye or for the reason that it impedes close cultivation to a slight degree. It may be supposed that the loss of such a member will be balanced by a resultant increase in vigour in some other portion or in the whole of the tree, but, in an aged tree, the improvement more often than not is negligible or insignificant.

Hard Cutting Undesirable in Bearing Trees.

Symmetry and shapeliness can be induced fairly readily in young trees, and are quite desirable while they can be obtained without reverting to the practice of hard and drastic cutting. For example, for many reasons which are mechanical, biological, nutritional and environmental, Apple trees sometimes tend to grow in a lopsided manner, one side remaining somewhat stunted while the other grows quite vigorously.

Generally, an attempt will be made to check the strong growing half by hard cutting in order to bring about stimulation of the stunted limbs, but, unless the cause of the poor growth is removed or corrected, heavy pruning can only lead to the suppression of the whole tree if it is continued for a period of years, particularly if it is supplemented by severe Summer pruning treatment. Indeed, more success can be expected from humouring the natural bent of an individual tree than by setting out to train it in the way it is thought that it should go. In a collective sense this applies to all the trees of one variety.

It remains true, however, that certain hard cutting is conducive to fruitfulness, but this is sometimes obtained largely at the expense of size and longevity in the tree, and ultimately leads to the premature deterioration of the fruit spurs themselves. This is indicated by the development of weak blossom buds, which fail to set fruit, and in the production of small fruit in the absence of fertiliser.

Under normal conditions, and in a general sense, continued hard cutting is undesirable, particularly when practised on bearing trees.

The Ill Effects of Wounds.

Furthermore, just as a slanting cut made behind the terminal bud of a shortened leader or lateral has the effect of weakening that bud, so also can a sub-section of a spur be weakened by a similar cut, and if, as is sometimes the case, that sub-section is intended to be the foundation of a new spur, the whole development is attenuated. Over a period of years it is possible for numerous wounds of this character to be inflicted on a tree with bad effects. It seems apparent then that trees become devitalised, not only by the depressing influence of heavy pruning, but also, to a slight extent, by reason of the wounding which accompanies it if great care is not exercised.

The superiority in practice of comparatively light pruning methods can be demonstrated with no uncertainty on young trees and the continued use of the "skeletonised" system of young tree pruning cannot be too strongly deprecated.

Three express locomotives of the 4-8-4 type are to be constructed at Newport Workshops for use on the Melbourne-Ararat run. These will be the largest, heaviest and most powerful engines in Victoria, and will obviate "double headers" on this route.

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Enquiries Are Invited by Advertisers on This Page for Fruit for Export or Sale on The Adelaide Market.

Market Notes and Prices

FRUIT PRICES IN THE SYDNEY MARKET.

Survey of Operations for the Period April 24 to May 25, 1939.

THE COMPARATIVE BRIGHTNESS that characterised the fruit trade early in the year has gradually faded, and during the last four weeks trading has been very quiet. **Apples, Pears** and **Bananas** have been the fruits most plentifully supplied, with supplies of **Grapes, Pineapples** and several other fruits appearing in reducing quantities. New season **citrus** has, of course, been appearing, and supplies are likely to be much heavier within the next three or four weeks, while Tomatoes, which are usually scarce at this season of the year, have been available in unusually large quantities.

The chief turnover, however, has been in Apples and Pears, the bulk of which has come from Tasmania, arrivals for the five weeks since April 24 approximating 275,500 cases. Of this quantity, probably almost half has been Pears, the Pear quota only lessening and falling beneath 50 per cent. during the last couple of weeks. This Tasmanian fruit has been very welcome, and, in fact, the Sydney public has been depending upon the Island State for its supply of Apples, if not Pears.

The quietness that descended upon trading was chronologically seasonal, but not seasonal as far as temperature and weather conditions were concerned, for generally the Autumn has been extremely mild. In previous years quiet trading has been attributed to frosts, and the preference of the public for green vegetables for the making of hot dinners and soups, but the frosts have not occurred until within the last few days, and, strange to say, the vegetable market both in demand and in values obtained has been far more depressed than has been the fruit market. Seeking a reason for this quietness, the opinions expressed by retailers confirms the opinions held by people engaged in other forms of business, and those opinions are that money is scarce and some unemployment exists in the community.

Values of Apples and Pears, nevertheless, have been at a very satisfactory level, when the product was of reasonably good quality. Some difficulty has been experienced with that proportion of Apples and Pears that has been of very small size, and also with that section that has shown advanced maturity or softness. It is probable that a larger proportion than usual of both Apples and Pears have shown poor keeping quality and have been small, at least amongst the fruit arriving from Tasmania. New South Wales Apples have been very scarce, Granny Smith appearing in larger quantities only recently, as growers have decided that it is advisable to unload a proportion of their large sizes. Jonathans, however, have been very scarce, and Rome Beauty still less noticeable, while demand for large sized Delicious Apples has gone unsatisfied. It appears evident that those growers in this State who possess supplies of fruit are holding it in the expectation of supplies from all sources lessening in the near future, and of values consequently improving.

Prices: Apples (Extra Fancy, Fancy and Good): Cleopatra (Tas. 4/- to 8/-, W.A. 6/- to 8/-), N.S.W., 5/- to 8/6 per bushel; Crofton, Tas., 8/- to 11/- per bushel; Delicious (Tas.

5/- to 8/-, few 11/-, W.A. 8/- to 12/-), N.S.W., 8/- to 15/- per bushel; Democrat (Tas. 6/- to 7/-), N.S.W., 6/- to 8/- per bushel; French Crab, Tas., 5/- to 8/- per bushel; Geeveston Fanny, Tas., 5/- to 8/- per bushel; Granny Smith (Tas. 7/- to 10/-, W.A. 9/- to 11/-), N.S.W., 7/- to 10/-, few 12/- per bushel; Jonathan (Tas. 5/- to 10/-, W.A. 8/- to 10/-), N.S.W., 5/- to 9/-, few 11/- per bushel; London Pippin, Tas., 4/- to 6/- per bushel; Rome Beauty (Tas. 6/- to 9/-), N.S.W., 5/- to 9/-, few 11/- per bushel; Sturmer Pippin, Tas., 5/- to 6/- per bushel; Scarlet Permain, Tas., 5/- to 8/- per bushel; Stayman Winesap, N.S.W., 9/- to 12/- per bushel; Tasman's Pride, Tas., 5/- to 6/-, few 7/- per bushel; small and "D" Grade lower.

Pears: The marketing of Winter Cole is now well advanced, Tasmanian supplies being smaller than a few weeks ago. Large sized fruit has been scarce and clearances of the large stocks of extremely small fruit has been made on occasions at as low a figuré as 4/-. Packham's Triumph Pears from New South Wales have been rather small, the demand, as is customary, being for large sizes in this type. Winter Cole and Josephine are now popular, while other types of Pears are mostly clearing at a satisfactory figure, provided they are not showing advanced maturity and are not too small.

Prices: Beurre Bosc (Tas. and Vic. to 7/-), N.S.W., 5/- to 7/6 per bushel; Josephine, Tas. and N.S.W., 6/- to 10/- per bushel; Packham's Triumph, N.S.W., 6/- to 13/- per bushel; Winter Cole (Tas. 4/- to 11/-, few 12/-), N.S.W., 5/- to 11/-, few 12/- per bushel; Winter Nelis, Tas., 7/- to 10/- per bushel; small and "D" Grade lower.

Bananas: Arrivals on the Sydney market for the five weeks under consideration were just under 54,000 tropical cases, and values were fairly stable, prices at present being at from 16/- to 22/- per tropical case.

Citrus Fruit.

Grapefruit: The local product has now taken the place of the imported article, although Palestine and Californian Grapefruit can still be seen in the windows of the retailers. The increase of locally grown fruit, much of which has been rather light in weight and immature, has caused values for the average arrival to recede. At the same time, however, better developed fruit has come forward and is selling up to 12/-, other types being mostly 4/- to 7/-.

Lemons: Large main crop fruit has been marketed within recent weeks, growers in most instances using ethylene to improve the color. Supplies, however, gradually exceeded the demand, with the result that there has been an accumulation of the artificially colored fruit and some wastage is observed in the accumulated stocks. Italian Lemons and some beautiful fruit from Queensland was available earlier in May, but these lines are now unpayable, owing to the competition of the coastal product. Prices at present are local 3/- to 5/-, with a few to 7/-, with inland grown fruit at 6/- to 8/- per bushel, inferior lines being lower. Inland grown Lemons are being supplied to New Zealand.

Mandarins: The well colored Imperial Mandarin is now being displaced by the more popular Emperor, most of this fruit being a little larger than usual. Queensland has forwarded Beauty of Glen Retreat, Scarlet and Emperor, only the former type now being available. Reports from a number of sources indicate that Mandarins are not likely to be nearly as plentiful as is usual. **Prices:** N.S.W. Imperial, 3/- to 6/- per half bushel; N.S.W. Emperor, 4/- to 8/- per bushel; Q'land., Beauty of Glen Retreat, 6/- to 13/- per bushel.

Oranges: The production of Navel Oranges in this State is one of our most important fruit items, and at this season of the year great interest is always displayed in the prospects. Within the last week or two, supplies have increased steadily, but prices have not receded to the extent that they usually do. Artificial coloring, which was the prerogative of only a few growers some years ago, has this year been followed by many growers, and unfortunately not always with success. Scald and quick breakdown has sometimes occurred, and whether this has happened in the market, in the retailer's shop or in the home of the purchaser, the effect upon consumption of Navels must be a deterring one. Most reports indicate that the crop of Navels is a light one, and the large size of most fruit coming forward would confirm this opinion. In fact, with average arrivals at from count 80 to 125, sales at 9/- to 10/- became most difficult, and values for the large fruit have receded to around 6/- and 7/- in most instances. Supplies have mostly come from the Hawkesbury River and the Gosford district, with the M.I.A. forwarding a few Thompsons Seedling. Second crop Valencias are still available from the Wyong district, the smallness of the fruit being in its favor, while the same applies to medium to small sized Oranges or other types. **Prices:** Navels, N.S.W., Standard and Special, counts 64-72, local 4/- to 6/-, inland 5/- to 7/- per bushel; counts 80-113, local 5/- to 7/- few 8/-, inland 6/- to 7/-, few 10/-; counts 125-138, local 7/- to 8/-, few 9/-, inland 7/- to 8/-, few 10/-; counts 150-175, local, 6/- to 8/-, inland 7/- to 8/- per bushel; counts 180-216, local 6/- to 7/-, two bushel crates 16/-; White Siletta, N.S.W., 3/- to 5/- per bushel; Valencias 2nd Crop, 4/- to 6/-, few higher per bushel.

Grapes: Late rains in the growing districts ruined the value of most O'hanez and Purple Cornichon, and sale has at all times been difficult. This fruit is still coming forward in small quantities, but of better quality, the nominal value being 5/- to 7/- per half bushel case.

Quinces: Small supplies are still available, but the crop was in most instances one of small fruit and sale of the small sizes was difficult; 5/- to 7/-, with small very slow, per bushel.

Tomatoes: The late plantings that took place in most districts, following the rains after Christmas, have resulted in heavier supplies than usual, and in the absence of frosts, the public has benefited. The prevalence of the New South Wales fruit has been disastrous to the early fruit from Bowen in Queensland, values of which have been low also. It is probable, however, that frosts in the near future will reduce the arrivals of Tomatoes from most districts in New South Wales. Prices at present are 1/3 to 4/-, the former price being that paid by factory buyers. Queensland are mostly 3/- to 5/-, while repacked fruit has been sold at anything from 4/- to 7/-.

Tropical Fruits: The Custard Apple season is apparently well advanced, and supplies are becoming smaller each week. Values late in April were from 3/- to 6/-, but recently have become 6/- to 8/- per half bushel. Passionfruit was in very large supply from all sources until recently, both the far North Coast and metropolitan districts now forwarding. The quality of this fruit varies considerably, and small fruit is worth only from 3/- to 5/-, with better quality fruit at 6/- to 7/- per half bushel. Queensland has forwarded until recently, but supplies are now likely to cease. Papaws come forward from Queensland each week, weekly arrivals approximating 330 tropical cases and sell at from 10/- to 14/-. Pineapple supplies also are less than a month or two ago, weekly arrivals now totalling just over 1,000 cases per week, while prices are at from 10/- to 18/-, with particular brands of selected counts a little higher. — L. T. Pearce, Market Representative, Fruitgrowers' Federation of N.S.W.

QUEENSLAND.

Brisbane (22/5/39).—Messrs. Clark & Jesser report as follows:—For the past few weeks the supply of Apples has greatly exceeded our expectation, with the result that prices have eased considerably. Present values are: Jons., 2⅛ to 2¾, 9/- to 10/-; smaller sizes, 7/- to 8/-; other colored Apples, 7/- to 8/-; G. Smiths, 9/- to 10/-. Pears: Winter Coles, 10/- to 12/-; smaller sizes, 6/- to 7/-; other varieties of Pears, 7/- to 8/-. Oranges: Navels, 8/- to 9/-; Common, 6/- to 7/-. Mandarins: Glens, 9/- to 10/-; Emperors and Scarlets, 6/- to 8/-. Lemons: 8/- to 10/-. Passionfruit: 7/- to 8/-. Custard Apples: 3/- to 3/6 half case. Pineapples: Smooths, 6/- to 7/-; rough, 8/- to 9/-. Tomatoes: 3/6 to 4/6.

VICTORIA.

Melbourne (3/5/39): Wholesale Fruit Merchants' Association prices: Per Case: Apples, eating, 6/-, 9/-; choice higher; cooking, 4/-, 7/-. Bananas, double case, 14/-, 20/-; few higher. Grapes, 4/-, 7/-. Grapefruit, 5/-, 8/-, few higher. Lemons, 4/-, 8/-, selected higher. Mandarins, 8/-, 12/-; selected higher. Oranges, Navels, 7/-, 11/-; selected higher. Passionfruit, half case, 4/-, 8/-; choice higher. Papaws, 7/-, 10/-. Pears, 4/-, 10/-; choice higher. Pineapples, 10/-, 16/-; few higher. Tomatoes, 6/-, 12/-; choice higher. Celery (S.A.), 5/-, 9/-, few higher.

FALSE SPRING.

Because of the long spell of "Indian Summer," Nature seems to be confused, with the result that birds are nesting, trees are blossoming, and growth which should be preparing for the dormant Winter is springing to life. In various districts, trees have burst into flower and in some instances there are quite flourishing second crops of Apples. Recently a box of Cherries was forwarded to the Sydney market—the results of a second crop.

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Victoria: Harcourt Fruitgrowers' Progress Assn. Ltd.
Harcourt Fruit Supply Co. Ltd.
Victorian Central Citrus Assn. Ltd.
Tasmania: State Fruit Advisory Board.
New South Wales: Griffith Producers' Co-op. Co. Ltd.
Batlow Packing House Co-op. Soc. Ltd.

Motor Cars, Trucks, Tractors

WHY THE AUTOMATIC TYRE PUMP DELIVERS CLEAN AIR.

The automatic tyre pump is actuated by the engine—it only being necessary to unscrew one spark plug and screw in the inflator attachment. When the engine is running, the hose end connection is applied to the tyre valve stem in the usual manner, pumping up a tyre in a few minutes without any effort on the part of the user. It is not readily understood how only clean air, free from petrol and oil vapour, is pumped into the tyre. This is not so difficult as one would imagine, and will be easily understood from the following explanation.

Under normal conditions on the induction stroke of the piston (when the exhaust valve is closed and inlet valve open) petrol and air would be drawn into the cylinder. But as the inlet period of one cylinder overlaps at another cylinder, there is always a vacuum in the induction manifold. When the automatic pump is in operation, that particular piston has no opportunity of increasing the existing vacuum, because of the free opening of the pump inlet valve, which allows an easier passage for clean air from the atmosphere to enter the cylinder.

In other words, vacuum in the induction manifold offers resistance to the piston on the induction stroke, whereas the automatic pump allows a free passage without any resistance. Therefore, as only pure air can be drawn into the cylinder, only pure air can be pumped out.

Moreover, the absence of vacuum in the cylinder reduces the amount of oil drawn on to the cylinder walls, so that no oil can be absorbed by the clean air in the cylinder. If this were not so, then it could be said that all compressors delivered an oily mixture, because compressors and car engines are lubricated in the same manner.

A recent design of this type of pump—the Nasco Automatic Tyre Pump—has lately been introduced to the market; this is appreciated by motorists, farmers, owners of caravans and small workshops.

CHANGE TO WINTER OIL.

Reduced Wear — Easier Starting.

RECENT TESTS HAVE PROVED there would be less starting trouble in the cold weather, and far less engine wear if more motorists would bear in mind the advice of the car manufacturers and the oil companies, to change to the special oil recommended for Winter driving. The body or viscosity of the engine oil has a vital influence on starting and on starting wear.

Apart from starting, there is also the vital factor of lubrication protection to the working surfaces of cylinders, crankshafts and bearings at all operating temperatures. Rapid distribution of oil to these surfaces immediately after starting, and thorough protection over the whole driving period, are essential. To ensure this Winter oil must be fluid enough at low temperatures to give easy starting, and yet have sufficient body to maintain an effective oil film between working surfaces at all engine temperatures that are likely to be encountered.

The use of heavy oils in Winter will result in a period of "dry running" immediately after starting when the oil is too thick to be instantly circulated to working surfaces and form the vital oil film. This "dry running period" may last two or three minutes. During this time as much wear can occur as would be caused by more than a thousand miles of normal driving.

That is why Vacuum Oil Company advise motorists to "winterproof" their cars by changing to the special "double range" Winter oil—Mobiloil Arctic. This recommendation applies to practically every popular make of modern car. The few variations, due to the difference in engine design and oil circulating systems are set out in the Mobiloil Chart of Recommendations.

In Paris if a cyclist is injured when riding on a main road where a cycle track is provided, he is held responsible for the accident.

WHEN GREASING A CAR.

It is important to keep one's hands clean when greasing a car, otherwise traces of grease will be left on upholstery, steering wheel and other parts which come into contact with clothes.

Use a rough cloth dampened with water. A quick wipe of the hands with this cloth will remove all traces of grease, and the mechanic or owner may touch any part of the car without fear of leaving greasy marks.

A new process to eliminate glare caused by reflected light from glass is being developed by experts of the General Electric Company (U.S.A.), who are hopeful that the process may soon be commercialised.

To render glass glareness, the surface of the glass is covered by a very thin transparent film, which nullifies or neutralises rebounding light rays, with the result that framed glass so treated appears as though there were no glass at all, regardless of the angle viewed from.

The process when commercialised, will no doubt be applied to the wind screens of cars thereby minimising the dazzling glare motorists have at times to contend with when travelling against a stream of motor vehicles, being driven towards the setting sun.

MOTOR CAR MANUFACTURE IN AUSTRALIA.

The Prime Minister (Mr. Menzies), in a recent announcement, stated that the manufacture of Australian motor cars would be established and fostered. The engines and chassis are to be manufactured in Australia and there is to be no undue delay in establishing the industry. It is desired that any company undertaking manufacture should be Australian in character and policy, but no manufacturing monopoly could be granted to any single company. The public interest will be protected in regard to price.

PETROL SAVING.

Without Loss of Engine Performance.

Dirty or inefficient sparking plugs can cause an increase in consumption of petrol as much as one gallon in ten. It is usually found, also, that an increase in the pertol used is accompanied by a gradual falling off in performance—starting is not so easy, pick-up rather sluggish, and acceleration less snappy, while hills previously taken on top now call for second.

The remedy is to have the plugs cleaned, as it is not a job that the motorist himself can do really satisfactorily owing to the lack of proper facilities. After being in use for some time the plug centre (that is, the part inside the screwed metal body carrying the centre pin) becomes encrusted with an oxide deposit, actually a residue from the burnt fuel. The amount of this deposit and the time it takes to accumulate depend largely on the fuel used, some are much more dirty than others. The oxide deposit, which is a cause of plugs misfiring, is about the same color as the insulator of a plug, and its removal is practically impossible with ordinary cleaning methods.

The AC Spark Plug Company have developed a highly efficient cleaning machine, and these are in use in most of the reputable garages.

STEADY THROTTLE OPENING WILL SAVE FUEL.

Because of the considerable waste of fuel, especially with carburetters of the type incorporating an acceleration pump in their design. The pedal should operate smoothly with correct springing tension. With the organ pedal type of pedal a block of wood attached to the floor at the right hand side will form a footrest, which will aid in maintaining a steady opening.

The height from the floor of the rest should correspond with the depression necessary to give your favourite cruising speed. Slight variations in speed are obtained by rocking the foot sideways, longer variations by slipping the foot to the left sufficiently to allow free operation of the pedal. Small types of pedal designed to slide under the sole of the shoe are considerably improved in smoothness of action by fitting to them a roller which also saves wear on the shoes.

GOOD MILEAGE IN VAUXHALL CARS.

40 miles per gallon is the claim made for Vauxhall "Wyvern," but this is more or less of a conservative estimate, as in a recent R.A.C.V. test it registered 48.2 miles. This model is extremely pleasing in appearance and is available in four smart and practical body styles.

In another recent R.A.C.V. test over an exacting course of 254 miles, the Vauxhall '25' gave 26.5 miles per gallon. This model should prove popular, because of its added comfort and safety, and "T.T." springing absorbs every inequality in the road by its unique advantage of automatically regulating itself to every type of road. On good roads the springing is very flexible; on rough roads it automatically becomes stiffer.

SPECIAL NOTICE TO FRUITGROWERS

All Members under Fidelity Bond

In response to numerous requests from growers for information as to who are members of the

Wholesale Fruit Merchants' Association of Victoria

the following list is given. All are members of the above Association, and are registered firms carrying on business in the

WHOLESALE FRUIT MARKET, MELBOURNE.

STAND NUMBERS ARE AS INDICATED IN PARENTHESES.

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REGAN & KENNY (Successors to Wm. Sweeney). (33).

Correspondence is invited by the Association.

Office : 21 Wholesale Fruit Market, Queen Street, Melbourne. Phone: F 4866.

The Pig Pen

PIGS REQUIRE PASTURE.

Approximately one-third of the diet of young pigs may consist of good pasture. However, if given bulky foods only they will not grow so rapidly, because of the limited capacity of their digestive tract. In the case of dry sows, four-fifths of the diet may be provided as pasture.

Pasture, being relatively cheap fodder, should be used to the greatest economic capacity in pig feeding. Not only does grazing provide pigs with cheap food, but it provides a measure of insurance against deficiencies of minerals and vitamins which occur frequently when pigs are confined to sties.

Pigs require a relatively high proportion of protein in their food, and they are unable to cope with large amounts of fibre; it is therefore desirable to graze pigs on pasture or forage crops when they are young and succulent.

Annual forage crops have the advantage of yielding large quantities of green feed in a short time; also, the practice of ploughing and planting pig paddocks twice a year is a satisfactory method of providing sanitation and control of parasites in the piggery.

However, some permanent pasture is usually desirable in the piggery, but it should be stocked lightly and given frequent rests to preserve the stand and to prevent fouling of the paddock.

Wherever it can be grown, lucerne provides the best permanent pasture for pigs, but the stand should be mown for a season or so in order to establish it. A stand of lucerne solely for cutting should be regarded an essential. Fertilise liberally with lime and super., and reserve the cut for hay or for breeding stock.

Kikuyu Grass, with its capacity to take hard grazing after 18 months is a reasonable substitute for lucerne. It is introduced by roots.

Invaluable Winter pastures are secured from certified Prairie and Toowoomba Canary Grasses.

To prevent the pigs rooting and spoiling the stand the cartilage in the nostril should be trimmed when they are a few weeks old.

CARE AFTER WEANING.

CARE OF YOUNG PIGS at weaning time is essential. If the young pig has been given additional feed to that received from the mother it should have a good start and should then be fed, at least twice daily, all that it will eat up clean.

The young pigs should have the run of good fresh pasture if possible, and should be fed on crushed grains, pollard, and skim-milk, with lucerne, rape, or barley as green feeds, or pumpkins, mangold, etc., if possible.

All slop feed should be fed while sweet, and should preferably be given warm, after having been steamed for about four hours. The steaming of such grains as are given is attended by better results than merely soaking.

The pigs should have a shallow wallow (preferably of concrete) in which the water is kept as fresh as possible.

Wood ashes, cinders, and a piece of rock salt should be available in the yards, which should be provided also with a dry shelter shed and bedding.

Too many pigs should not be kept in one yard. When about 3 to 3½ months old, separate any boars that may have been kept, and place in different small paddocks, where they should be kept until ready for penning prior to marketing as porkers or baconers.

It is important to always have the pigs graded, so as to keep the same sized animals together, thus preventing large pigs from jostling the smaller ones at the feed trough. Pigs will be found to do much better if a system of grading is in force. Approximately forty pigs can be run to the acre, but the exact number will depend upon the size of the animals and upon the pasture provided.

Home Section

LEMONS AND THEIR USES.

LEMONS CAN BE USED in so many ways, especially by the housewife, and are also valuable as medicine, stated Mrs. J. Hancock, of Wasleys, S.A., before a meeting of the S. Aust. Agricultural Bureau.

Here are a few ways for Medicinal purposes:—

For Sore Throat.—Mix honey, Lemon and olive oil in equal parts. Take one teaspoon frequently.

For Influenza.—Take hot Lemon drink and 2 Aspros going to bed.

For Heartburn and Dyspepsia.—The juice of ½ a Lemon in a tumbler of water—no sugar. Lemons are a great kidney cleanser, and also relieve blood pressure if taken in drinks.

Their Uses to the Housewife.

Lemon juice instead of vinegar for lettuce salad is very nice. Lemon on fish is very tasty. The juice of the Lemon in a melon pie instead of acid. The use of Lemon juice in making pastry makes it much lighter.

Snow Pudding.

Put into a saucepan 2 cups of boiling water, juice of 2 Lemons, small cup of sugar. Take 2 tbspns. cornflour and mix with ¼-cup of water, add to other and boil 10 minutes. Let cool, add whites of 2 eggs beaten stiff.

Candied Lemon Peel.

Cut fruit lengthwise and remove pulp; soak the peel in salt and water for 3 to 4 days. Drain and boil in fresh water until soft; place in sieve and drain well. Make a syrup of 1lb. sugar to 1 quart of water and in this boil the peel until clear, then make a very strong syrup by mixing sugar with just sufficient water to melt it. Boil the peel in this slowly until the sugar candies. Take the peel out, dry it before the fire or in a cool oven; sprinkle with powdered sugar.

Orange and Lemon Peel.

Take the peel of halves of Lemons or Oranges. Soak in well salted water for 2 days, drain, boil in slightly salted water until soft and clear. Make a syrup of 1 cup of boiling water and 2 cups of sugar, boil 15 minutes, put the peel which has been drained very well into syrup and boil ½ an hour, or until it looks clear, then spread the peel on a dish upside down to drain well. Add ½ cup more sugar to the syrup and boil about 10 minutes. Pour into the peel, allow to dry in the sun or in the oven, preferably the sun.

Lemon Cheese.

¾lb. sugar, ¼ lb. butter. Melt in a basin in a saucepan of water; beat well 2 eggs, add juice of 2 Lemons. Stir well and let come to the boil.

Apple Recipes

Apple Souffle Pie.

½ lb. Apples, 1½ dessertsps. sugar, 1 tablesp. water, grated rind ½ Lemon, 3 egg yolks and 4 whites, 1 oz. butter, 1 oz. flour, ¼ pint milk, 1 tablesp. castor sugar, short pastry. Stew Apples, rub through sieve and allow to cool. Roll out pastry and line rim and ½ way down pie dish with it. Trim edge and decorate with small circles of pastry, damping them to make them adhere. Melt butter in a saucepan, add flour and when well blended, stir in the milk and bring sauce to the boil. Cook till it leaves the sides of the pan, keeping well stirred. Draw pan aside and cool slightly. Add Lemon rind and castor sugar. Beat in the egg yolk one at a time, then add 1 gill of Apple pulp before folding in the stiffly whisked egg whites. Butter the unlined part of the pie dish and glaze pastry by brushing with milk. Turn in the mixture and bake it in a hot oven at first lessening the heat as soon as pastry is set.

Apple Meringue Pie.

Short pastry, 1¼ lbs. cooking Apples, ¼ lb. sugar, 1½ gills water, 1 dessertp. flour, ½ oz. butter, 2 yolks eggs, 2 whites, 2 tablesps. castor sugar, ¼ level teasp. ground cinnamon, glace Cherries and angelica. Line Pyrex plate with pastry, cook and cool it. Stew Apples with 1¼ gills water and sugar till tender. Rub through sieve and return to saucepan. Smooth flour in remainder of water and stir into Apple pulp. Boil for a few minutes, then add butter. Cool a little, and add beaten egg yolks. Cook for a few minutes without boiling, then cool and turn into pastry case. Beat egg whites stiffly, fold in castor sugar and cinnamon. Heap on top of Apple, dredge with castor sugar and put in a cool oven to set meringue. Serve hot or cold, decorated with glace Cherries and rings of angelica.

Household Hints

If you feel disappointed with the result when you have used furniture polish, do not blame the polish. Slightly dampen a cloth with soap suds, wipe over the furniture, completely dry it, and then use the polish with a warm, soft cloth.

FOOD TOO SALTY.

Over-salted food can still be saved by dropping a clean piece of sponge into the saucepan.

Old newspapers soaked in the soapsuds after washing day till all is a soft mash, and squeezed into balls, which, when dried get perfectly hard, can be stored to back up a low fire in the Winter. A large quantity of old paper can be stored thus in a small area.

WASHING BRUSHES.

Before washing a wooden-backed brush, rub vaseline into the polished wooden back to prevent its cracking.

The Silver Teapot.

A silver teapot soon becomes brown inside, and should be treated periodically to ensure that the inside is free from taint. Place a lump of soda in the pot and pour over boiling water. Leave for 24 hours and then wash the inside with thoroughly hot water. After this treatment the pot will be entirely free from stain.

APPLE BEVERAGES.

Summary of Broadcast Address by Mr. T. Kneen (Research Officer, Victorian Department of Agriculture).

IN A BROADCAST ADDRESS over 3DB Melbourne recently, Mr. T. Kneen (Research Officer, Department of Agriculture) spoke of the pleasing taste and health qualities of Apple beverages.

Chief among these is cider, so popular in England and on the Continent. To make cider, special varieties of Apples have to be grown, and this is not widely done in Australia. In England the National Fruit and Cider Institute was formed to investigate the problems of the industry, and proper standards have been set up under the National Mark System, which is a distinctive mark indicating the origin and grade of the product. However, there is no doubt that **by skilful blending of our present Apple varieties and with modern methods of processing, we can produce good quality ciders of the necessary flavor and astringency to suit the national palate.**

It is of interest to note that some ciders have a high alcoholic content, but the most popular one is that containing about 2 per cent.

As a result of a great drive, particularly noticeable in Europe and America, for pure fruit juices of all kinds, there has been a tremendous amount of research into the production of pure unfermented Apple juice. **Most fruit juices have to be built up with sugars to form syrups, cordials and squashes, but this is not necessary with Grape and Apple juices**, and the demand for medium sweet unfermented Apple juice has been so great in Germany and Switzerland that the sale of fermented cider has been greatly depressed, and hotel and innkeepers have been compelled to keep them in store.

Despite the development in producing straight juices, which are consumed without alteration or additions of any kind, very large quantities of concentrated Apple juice are produced in America, Canada and France. Of a treacly consistency, this syrup has the advantage of being easily preserved because the high acid and sugar contents prevent the growth of micro-organisms. These concentrates are used for the preparation of unfermented Apple juice drinks and fermented cider.

The biggest difficulty with pure fruit juices of any kind is preservation. The addition of chemicals to poison the micro-organisms which would cause fermentation is not in the interests of public health. Pasteurisation suffers from the disadvantage that the juice acquires a distinct "cooked" taste. In Germany, the juice is roughly filtered and then carbonated at very high pressure. This temporarily checks any fermentation, and when the juice is required for bottling, it is sterilised by filtration.

However, there is no doubt that the public will get the pure fruit drinks they want in the very near future, for already there is a small but solid trade in Australia which is developing rapidly.

A book on fruit and vegetable juices, by Donald R. Tressler, Ph.D., Maynard A. Joslyn, Ph.D., and George L. Marsh, has just been issued.

Particulars can be obtained from the New York Agricultural Experimental Station, Geneva, N.Y., U.S.A.

Priced at 25/8, the book contains 80 illustrations, and deals with subjects including the principles of preparation and preservation, equipment, methods, utilisation and disposal of fruit wastes, and nutritive values.

Pruning Apple Trees in Canada

Some Interesting Sidelights

As Pruning Time for Deciduous Fruit Trees is now with us in Australia, growers will be interested to read of the system adopted in the sister Dominion of Canada.

Points of similarity and difference will be observed. The information is from the Publicity and Extension Division of the Dept. of Agriculture, Ottawa, Canada.

The Canadian hints are as follows:—

APPLE TREES BENEFIT from a certain amount of corrective pruning to remove dead or diseased branches, excess sucker growth, crossing and overlying limbs and to generally shape a tree to permit of efficient spraying and picking operations, states R. G. White, Dominion Experimental Station, Fredericton, N.B.

The ultimate aim of the pruner is to produce large, strongly built trees that have a large bearing surface and will be able to withstand the weight of heavy crops of fruit, or the strain of severe storms. **Roomy trees with a thirty foot spread or more and having a maximum height for efficient spraying and picking operations should be the idea in mind when pruning.** At the Fredericton Experimental Station, this work is done in late March and early April, corresponding to September and October in Australia and New Zealand, allowing sufficient time to cover all the orchards before the sap begins to flow in the Spring. The only tools necessary are a pair of pruning shears and an adjustable pruning saw.

Pruning begins with the young tree at planting time. The latest practice is not to head back the young tree. To offset the loss of roots, cut off at digging time, remove crowding limbs, so as to provide a mod fied central leader type of tree with four or five spirally arranged scaffold branches spaced approximately eight inches apart. The first limb is situated about thirty inches from the ground and the leader is headed back after the fifth branch has been established. When possible, branches with sharp angled crotches should be cut out, as these sharp angles may have bark intrusions, which render them weak and liable to break when subjected to a severe strain.

The nearer a right angle a limb is to the trunk, the stronger it is usually. Very little pruning is given for the next few years, as the trees grow faster and come into bearing earlier if given only light pruning during this period. Only those branches having a detrimental effect on the future shape of the tree should be cut out, leaving all the leaf surface possible to stimulate rapid development.

Older trees and mature ones are gone over each Spring to remove dead or excess wood. Sucker growth is usually the greatest offender as it generally starts from some main limb and grows perpendicularly through the tree, irrespective of tree shape. This type of growth is also structurally weak, breaking easily. It is advisable to remove the majority of these suckers except where a hold may be filled to advantage.

At one time, some thinning of the outer twigs was considered good pruning. The feeling to-day is that the majority of the high grade fruit is borne at the sides and top of the tree, and that the younger wood is not likely to grow too densely. If the thin, unproductive wood is taken out of the lower centre to open it up for spraying and to eliminate the poor fruit it produces, that should be sufficient, keeping in mind the idea that where possible the scaffold limbs should have side branches arising within two or three feet of the main trunk.

Varieties differ in their habit of growth, some like the McIntosh, being of a spreading nature, others such as the Canada Baldwin and Sandow being erect. In general, however, the principles to apply are the same for each case namely, a modified central leader with four or five scaffold branches, side branches within two or three feet of the trunk, the removal of dead and diseased wood, crossing and crowding limbs and of suckers. Little if any cutting is done where the best fruit is produced, with the lower centre opened up slightly to remove thin unproductive wood and allowing space for inside spraying. Snipping of small twigs is to be avoided.

All cuts should be neatly made at the juncture of the limb to be removed and another branch. If stubs are left, they rot back and cause breakages. Large limbs should be cut half way through from the underside and at a short distance from where the final cut is to be made. Another cut on the upper side, but nearer the trunk, will sever the branch from the tree, after which the stub may be cut off flush with the other limb. This avoids the nasty jagged splintering which often occurs of only one cut from the top is made.

When pruning operations are complete,

paint all cuts

over two inches in diameter with a white lead paint to which may be added a little lampblack to give it a grey colour. When mixing the paint, use raw linseed oil as a spreader, not the boiled form. Any form of drier, such as turpentine, is best left out as it injures the wood. The paint keeps the wood covered and preserves the cut surface until healing occurs.

Prunings may be hauled away to a brush heap and left until dry, or else may be burned immediately by starting the fire with dry wood and the green branches piled on snugly. They will burn quite readily.

By following these practices, those in charge of the Station orchards have obtained trees of the desired stature.

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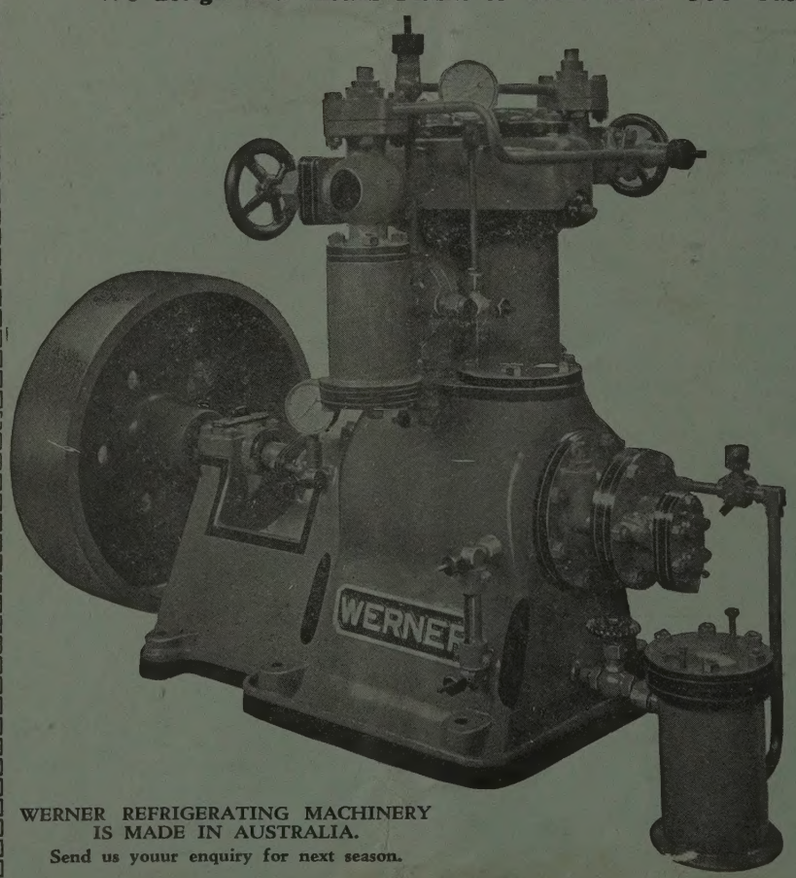

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QUEENSLAND APPLE EXPORTS.

Granny Smiths Appreciated by Bristol Merchant.

QUEENSLAND GROWERS were to be commended on the wonderful improvement made in the packing and get-up of their fruit over the last six years, stated Mr. A. R. Wilkins, a Bristol provision merchant, who visited Brisbane in May.

"Queensland Granny Smith Apples are of splendid quality," continued Mr. Wilkins, "and I congratulate the growers. I am in a position to speak with some authority, for I handle many thousands of cases of Apples each season, and I know the appreciation of buyers of Queensland Granny Smiths."

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